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AGRICULTURAL INSURANCE

A Practical Scheme suited to Indian Conditions

BY

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PREFACE.

THE following pages contain the result of an investigation into the subject of Agricultural Insurance with special reference to Indian conditions. An earnest endeavour has been made to carry on the studies in an unbiassed and scientific spirit, the practical aspect being always kept in view. A workable scheme has emerged from these researches and it is now placed before economists and administrative authorities in India for consideration and trial.

The methods and arguments used in the course of the investigation are of general application. But as vague theorizing is the greatest obstacle to the attainment of practical results in such matters, the conditions prevailing in the Mysore State have been adopted as the basis of calculations and a concrete scheme applicable to that area has been formulated. It is hoped that, by applying a similar method, it will not be difficult to frame a scheme for any other State or Province.

To reach the stage in which Agricultural Insurance will prevail generally amongst Indian agriculturists will be the work of many decades in the most favourable circumstances. It is very desirable that practical action should be taken at once as an experimental measure in some localities so that experience may be gained and the system improved, if necessary. In the meantime, other States and Provinces may be collecting the necessary materials in the shape of rainfall statistics. In this way, if a sound and satisfactory system can be evolved by constant study and experiment, it may be adopted throughout the whole of India in course of time.

The more important parts of the statistics on which the scheme formulated in this treatise is based are given in a condensed form in the appendices to the present volume. The rest has been carefully scrutinized and tabulated and a supplementary volume containing these figures will be published in due course.

The first seven chapters of this work were published in the Mysore Economic Journal in the years 1915 to 1917; but the necessity of presenting the whole scheme in a connected form led to the abandonment of the idea of publishing the subsequent chapters in the journal and the work is now placed before the public in a complete form suitable for careful and critical study.

There is much difference between Life Insurance and Agricultural Insurance of the kind developed in these pages; but all problems of insurance have some important elements in common. My eleven years' experience in connection with the Mysore State Life Insurance Scheme, first as Secretary to and then as President of the State Insurance Committee, has been of material help to me in the course of the present investigation. My studies in connection with the two important developments of that scheme in recent years, *viz.*, the organization of the Family Pension Branch and the throwing open of State Life Insurance to the general public, have also been of great use in this connection.

These studies demanded considerable patience and labour because a large amount of powerful opposition to the extensions referred to, had to be met and overcome. But I consider them amply rewarded not only because the extensions of the State Insurance Scheme in connection with which they were undertaken have been adopted in Mysore and have attracted attention in other parts of India, but also because they have been appreciably helpful in the development of a subject so important to the economic welfare of India as Agricultural Insurance.

A short paper on some aspects of Agricultural Insurance was read before the Indian Science Congress at its session in Bangalore in January 1917. The President of the Agricultural Section, Mr. J. McKenna, I.C.S., Agricultural Adviser to the Government of India, in inviting discussion on the paper referred to its "striking freshness and originality." In the discussion that followed, there was no difference of opinion about the usefulness of Agricultural Insurance, but doubts were expressed about its practicability and there was a general desire for more information. Such an attitude on the part of experts in Indian agriculture present at the conference was quite natural as in the compass of a short paper it was not practicable to deal with the subject at full length and in all its aspects. It is hoped that all persons interested in Indian agriculture and in the welfare of the Indian agriculturist will now give the subject the attention that its importance deserves and by their suggestions and constructive criticism help in the solution of the problem and expedite the adoption of a suitable scheme.

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I am deeply indebted to Dr. L. C. Coleman, M.A., PH.D., Director of Agriculture in Mysore, for some valuable suggestions with regard to agricultural facts assumed as the basis of argument and calculation in this work. I have, of course, introduced all the corrections suggested by him. My thanks are due to the Meteorological Reporter to the Government of Mysore for his kindness in placing at my disposal all the unpublished rainfall records in his office. The Deputy Commissioners of all the districts have furnished the necessary revenue statistics used in Chapter XI and Appendix IV, and it gives me great pleasure to acknowledge their valuable help. Mr. D. B. Ramachandra Mudaliar, Superintendent, Government Printing, Mysore, and Mr. G. Madhava Rao, B.A., B.L., my personal Assistant have helped me materially in passing the work through the press and I thank them for their kind assistance. I am also indebted to the Government of His Highnessthe Maharaja of Mysore for meeting all expenses connected with this publication.

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J. S. CHAKRAVARTI.

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GLOSSARY OF VERNACULAR WORDS.

Amildar—A revenue officer in charge of a part of a district known as the taluk.

Anna—One-sixteenth part of a rupee or anything else to be measured, *e. g.*, a crop.

Baragu—A kind of grain.

Chavadi—A shed or building used for the meeting of village officers and villagers.

Challan—A paying-in slip with which money is paid into a treasury.

Crore—Ten Million.

Cutcherry—Public office; court house.

Dodda Hatti—A kind of cotton.

Dafadar—A petty Police official or a senior menial servant in a Public office.

Gingili—An oil-seed yielding an edible oil.

Groundnut—A nut yielding a valuable oil used for a variety of purposes.

Hain—The name given to the more important rice crop in Mysore.

Hingar—The latter rains from July to November.

Haraka—A kind of grain.

Hobli—Sub-division of a taluk.

Inam village—A village given by the State as reward to persons who pay a consolidated revenue for it.

Jola—A kind of grain resembling maize.

Kandayam—Land tax; money assessment.

Kar—The wet season.

Kumbha—The constellation of Aquarius.

Maidan—A plain; the plain country.

Malnad—Hill country; the western and hilly part of Mysore.

Mesha—The constellation of Aries or Ram.

Mungar—The early rains from April to June.

Nakshatra—Star or planet.

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Raiyat—A cultivator; a petty agriculturist.

Raiyatwari—Pertaining to *raiyats* or agriculturists.

Ragi—A kind of Indian grain; staple food of a large portion of South Indian population.

Sajje Save—A kind of grain.

Sannahatti—A kind of cotton.

Sheristadar—The chief ministerial official of an office.

Sowcar—Money-lender.

Takavi—Recoverable advances of money to *raiyats*.

Taluk—A division of a district under the management of an Amildar.

Tula—The constellation of Libra.

AGRICULTURAL INSURANCE

CHAPTER I.

Is Agricultural Insurance Practicable?

Importance.

IT is difficult to realise what an effective system of Agricultural Insurance in an Indian state would really mean. It would be an inestimable blessing to agriculturists who form the majority of the population and to numerous other classes depending indirectly on agriculture for their livelihood. It would bring about nothing short of a great revolution in the economic life of the peasantry. It would remove the element of uncertainty which annually sits as a nightmare on economic progress and on public finance. The introduction of Agricultural Insurance would mean the application of the steadying forces of a valuable remedy to the most vital part of the country's economic system which is perpetually threatened and occasionally dislocated by an affliction of the severest character. The success of such a scheme would be a glorious triumph of scientific study and economic organization in solving one of the most momentous problems of all ages and of all countries.

A system of Agricultural Insurance in an Indian

Different aspects.

state will have many different aspects, each important in itself. In the first place, as failure of agriculture owing to drought and other general causes over large areas generally means enforced idleness to a considerable part of the population, a scheme of Agricultural Insurance in India would be, to a great extent, of the nature of unemployment insurance. It would afford the Indian agriculturist, to quote the words used by one of the greatest practical economists of modern times in connection with the National Insurance System of the United Kingdom,[1] "some kind of shelter against the slings and arrows of fortune." Again, from its very nature, Agricultural Insurance will serve as property insurance to a very considerable section of the population in respect of the most important part of their property. Then again, Agricultural Insurance in India will be a valuable kind of famine insurance. It would not indeed render unnecessary the provision which a state in India should make and the responsibility which it should assume for preventing death by starvation in times of agricultural distress. Such provision must continue to be made and such responsibility on the part of the state must continue. But, under the present circumstances, a famine in India does not generally mean grain-famine but money-famine, due to enforced unemployment of the agriculturist owing to unfavourable seasonal conditions.[2] An effective system of Agricultural

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[1] David Lloyd George in the preface to Carr, Garnett and Taylor's National Insurance.

[2] Morison's Indian Industrial Organization, pages 269-70.

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Insurance, therefore, by insuring the peasantry against serious pecuniary loss in respect of agricultural operations will render the country less liable to the ravages of famine. In this sense and to this extent, Agricultural Insurance will also be famine insurance.

A new field.

It is true that a system of Agricultural Insurance has not, as yet, been perfected in any country.[1] Life, fire and marine are at present the most important branches of insurance. In most countries, the benefits of insurance have been carried into many other departments of business, some of them being of a minor degree of importance. Thus, we have third party indemnity insurance including drivers' risks, motor-car risks, general third party premises risks, and lifts, cranes and hoists indemnity, etc. There are also personal accident insurance, guarantee insurance including fidelity guarantee and mortgage and debenture guarantee, plate-glass insurance, baggage insurance, excess bad debt insurance, registered articles insurance, livestock insurance, carriage insurance, burglary insurance, etc.[2] It is curious to contemplate that, while the benefits of scientific insurance have been carried to such relatively minor classes of risks, agriculture which is the largest industry of the world and one, which from its very nature is in urgent need of the benefits of insurance, is, as yet, unprotected by this great economic safeguard. Even the systems of national or communal insurance against sickness and unemployment introduced in many countries for the protection of the poorer classes, leave agriculturists severely alone. Thus, under the British National Insurance System, employment for purposes of health insurance, may not include "employment in respect of which no wages or other money payment is made where the employer is the occupier of an agricultural holding and the employed person is empolyed thereon."[1] For purposes of unemployment insurance also, agriculture is not included in the list of insured trades.[2] In fact, "in agriculture, even trade-unionism is at present, practically, non-existent in the United Kingdom."[3] An examination of the insurance systems as prevailing in different European countries, in the United States and in Japan, shews that though agricultural labourers working for wages are in many countries protected against disease and accident by

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[1] Agricultural Insurance seems to have been thoroughly studied in Japan though no scheme has as yet been brought into operation, probably owing to great wars. "His Excellency Viscount Nomura gave it to me as his conviction that an improvement of the agricultural interests of Japan was only possible by means of insurance, and requested me thoroughly to investigate the question as to whether the condition of the agriculturist could be improved by insurance. This, I answered in the affirmative."—Mayet.

[2] For various other kinds of insurance, such as, insurance against diseases of almost every description, against loss of documents, keys and season tickets, against forged transfers, etc., see Young's Insurance, pages 373-77. For some curious forms of insurance, *e.g.*,

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against the birth of twins or triplets, against the failure of open air functions through rainfall, against failure of wedding through disappearance of bridegroom, etc., see Bisgood's lecture on Principles of Insurance at the London School of Economics.

[1] *Vide* clause (*f*), Part II, first schedule of the National Insurance Act of 1911.

[2] *Vide* sixth schedule of the National Insurance Act of 1911.

[3] Encyclopædia Britannica, Vol. 27, page 146.

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their inclusion in a system of optional insurance, there is no protection to the small agriculturist against involuntary unemployment due to seasonal conditions or other circumstances beyond his control.[1] It must also be remembered that unemployment insurance even including the agriculturist can, at best, be regarded as a system of subsistence allowance and cannot be regarded as even distantly approaching in its scope a system of Agricultural Insurance designed to protect the agriculturists more or less adequately against any loss that may be sustained by them.

Different components.

(a) Buildings and implements.

A complete system of Agricultural Insurance in India should include (*a*) insurance of buildings including granaries and agricultural implements, (*b*) cattle insurance, and (*c*) insurance of crops. Of these, we may leave the first out of consideration for two reasons. In the first place, buildings and agricultural implements in India in the great majority of cases, are comparatively inexpensive and secondly, the risk of sudden and serious loss in connection with them is comparatively small. Of the causes which lead to total or partial loss of house property such as, action of rivers, volcanic eruptions, inundations, tidal waves, earthquakes, conflagrations and the like, some are practically unknown in India and others are so rare as not to count as important factors

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[1] *Vide* Schloss's Insurance against Unemployment and Gibbon's Unemployment Insurance, in which the systems prevailing in different countries are discussed ; also Japan Year Book, 1912, sections on Trade Unions, Insurance and Insurance of Workmen.

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in the general economic condition of the peasantry. A time may come when a system may be devised by which co-operative credit societies may assume even this small amount of risk and relieve the agriculturist from all uncertainties in the matter. But for the present, that part of Agricultural Insurance which relates to the soil, buildings, implements, stores and seed corn of the ordinary agriculturist, may be considered not to be of immediate or primary importance.

(b) Cattle.

The case of cattle insurance is different. It is a material factor in Indian Agricultural Insurance; for, cattle is all-important in Indian agriculture and disease and pestilence do havoc amongst the cattle with painful frequency. The system of *takavi* loans under which the *raiyat* can get an advance from the state for replacing cattle dying in periods of agricultural distress is in force in almost all parts of India and if properly and sympathetically worked, may be considered as taking the place of cattle insurance, to some extent. Under a system of insurance, the individual pays a premium for a series of years with the result that when his cattle dies, he gets the value of it. Under the loan system, on the death of his cattle, he can get the money required to replace it as a loan and the premia come afterwards in the shape of repayment instalments. But though in the loan system, the risk is spread over a number of years as in insurance, the only difference being that the payment of premia is transferred from the past to the future, the other essential element of insurance, namely the distribution of the risk of a few

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over a large number of insured individuals, is absent.[1] It is also likely that in the case of loans the repayment instalments would be heavier than insurance premia and not so well spread out as regards time. Moreover, while the insurance system represents the exercise of prudence and thrift followed by enjoyment of benefits as a matter of right, the loan system has to be regarded as the grant of a favour accompanied by the embarrassment of future indebtedness. For these reasons, it would seem desirable for our co-operative societies to evolve a system of cattle insurance somewhat on the lines on which the modern live-stock insurance companies work. The peculiarities of Indian conditions and the undeveloped state of Indian agriculture, particularly as regards the care and treatment of cattle, will make radical changes in the system adopted in advanced countries necessary before it will be applicable to our rural tracts. Nowhere is live-stock insurance a very lucrative business[2] and particular care will have to be taken in adapting the system to Indian conditions so that the growth of the co-operative movement may not suffer a check by undue risk being imposed on societies by this form of business.

(c) Crops.

The most important part of a system of Agricultural Insurance is the assumption by the insurer of the risk of loss or deficiency in respect of the periodical crops raised by the

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[1] The *takavi* system is an adaptation of the system of individual savings. For advantages of insurance over individual savings, see Gibbon, Unemployment Insurance, pages 227-28.

[2] Eke's Elements of Insurance, page 73.

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cultivator. In fact, the insurance of houses, stock and implements and that of cattle can be separated from Agricultural Insurance and grouped along with other forms of property insurance, leaving Agricultural Insurance synonymous with crop insurance. From the vital importance of the insured commodity, the vast scale of operations involved and the shifting nature of the risk itself, it is this part, *viz.*, crop insurance alone, which presents in a remarkable degree all the peculiarities and difficulties of a system of Agricultural Insurance. The question is, can any system be devised by which the agriculturist may be relieved, to a considerable extent, of the risk of loss or deficiency in respect of his crops which may arise from chronic or acute natural influences or from other conditions beyond his control?

Difficulties in fixing the basis of insurance.

The question bristles with difficulties. In the first place, is crop insurance to be on the value of the crop or on its quantity? Evidently, it is the value which should be the basis of rational insurance. But then, the value of the out-turn of a field depends on market prices. As the prices generally go up in an unfavourable season, the value of the out-turn in an unfavourable year may, in some cases, be more than the value of the crop in a normal one. Then again, there is the question as to the particular market the price in which is to be the determining factor. As the price will vary from week to week and month to month, a particular date the price on which has to be taken as the basis of insurance, has also to be fixed. If the average value for the whole year in which the crop is raised, has to be taken as the basis, as in theory it should be, all action under the insurance contract would have to be postponed till the end of the year. This would be extremely inconvenient, if indeed possible, from a practical point of view. In fact, in the present circumstances of India, or for the matter of that of any other country, the practical difficulties in the way of crop insurance on the basis of money value may be said to be almost insuperable.

In assessment.

There are difficulties also in the way of the quantity of crops being taken as the basis of insurance. In the first place, a less quantity, as pointed out above, may mean greater value and it is obviously untenable that a system of insurance should afford relief in a year in which the agriculturists receive a higher money value for their crops than in a year of average agricultural conditions. Then again, there is the difficulty of assessing the exact quantity of out-turn. For obvious reasons, the assessment cannot be postponed until after the harvest has been gathered for there would always be the danger of the out-turn being under-stated by the cultivator with a view to get the benefits of insurance. On the other hand, the estimate cannot be made while the crops are yet immature, for it would be difficult to ascertain at that stage what the real out-turn would be. The only possible solution is that the insurance authorities should make the estimate just before the harvest is gathered. For an extensive system of Agricultural Insurance, this means the concentration of a very large amount of

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vitally important work into such a short period as to make its satisfactory performance practically impossible.

And in eliminating the human element.

Then, there is another difficulty as regards crop insurance, which applies as strongly to a system based on value as to one based on quantity. If a field is protected by a system of Agricultural Insurance, what guarantee would there be that the agriculturist will do everything in his power to raise the normal harvest ? The out-turn of a field depends, to a very large extent, on the exertions of the cultivator himself, in the way of tilling the soil, manuring, tending and where necessary, protecting his crops, and in other ways. No insurance authority could ever maintain a supervising agency which would be able to watch and enforce that every insured field receives the required amount of care and attention at the hands of its cultivator. Unless some method can be devised by which this great difficulty is eliminated, a system of crop insurance would indeed be impossible. The remedy which is usually applied in other branches of insurance to overcome difficulty of a similar nature is what is known as *partial insurance* or *under-insurance*. Thus, in live-stock insurance, the bonus is usually limited to two-thirds of the fair market value of the stock. The principle of partial insurance or under-insurance is also applied extensively in fire insurance in which the liability of the insurer is limited to the market value of the property insured, and does not generally cover consequential losses, such as rent, loss of profits, etc., though some companies go even so far as to insure

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net profits and standing charges. In cases where the insured articles, such as live-stock, houses, factories, etc., have got a definite market value, the principle of under-insurance is indeed a valuable safeguard against negligence and wilful loss on the part of the insured. It must be noted, however, that even in these cases, the benefits of insurance and the value of this safeguard, are in inverse proportion to each other. If a house is insured against fire for only half its value, the protection of the insurer against wilful damage by the insured is indeed strong. But the benefits of insurance in a case like this go only half way. In the case of Agricultural Insurance, however, where the commodity to be insured, *viz.*, the crop, is not an existing thing but has to be created by the exertions of the insured, under-insurance can hardly be regarded as an efficient safeguard. An insured cultivator, if dishonest, will indeed have reasons to be satisfied if he can get from the insurer half the value of a normal crop without any appreciable exertion on his part.

Difficulties enhanced by certain Indian conditions.

It is, no doubt, owing to difficulties such as those stated above, difficulties both inherent in the system itself as also in its practical application, that a system of crop insurance has not as yet been adequately developed in any country. It exists only in a very small measure in some countries in Europe in the shape of insurance against hail.[1] These difficulties

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[1] It is interesting to note what an eminent authority on insurance has to say about this fragmentary form of Agricultural Insurance : "Hail storms' damage to growing crops can be protected

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against a system of crop insurance as such, apply equally to India. In fact, the illiteracy of the great majority of cultivators, the want of detailed village statistics, and the general backwardness of the population, very much enhance the difficulties in the way of introducing a direct system of crop insurance in this country. But fortunately, there is a factor in Indian agricultural conditions which makes an indirect system of Agricultural Insurance not only possible but also easy of practical application.

Indian agriculture and rainfall.

Indian agriculture is dependent almost entirely on rainfall. The so-called dry crops depend directly on rain, and of the wet crops, a considerable part depends on tanks or other works which, while they are useful for storing and seasonably distributing the year's rainfall, themselves fail in seasons of drought. The percentage of agricultural land that can be effectively protected against severe drought by irrigation works of large magnitude is small. In these circumstances, the quantity of rain during the year and its distribution as regards time are the essential factors which dominate Indian agriculture. Of all the acute and chronic dangers to the crops of the cultivator in different parts of the world—damage by insects, diseases of plants, earth-

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and the insurance is based upon the acreage covered by the crops. We learn from the experience of a certain company that their losses under this class of insurance, though the risks were carefully selected, have proved exceedingly severe, and so far, therefore, as this particular record indicates, the exposed position of agriculturists forcibly suggests the necessity of this special protection."—Young's Insurance, page 375.

quakes, landslips, water-spouts, hail, inundation by sea, frosts, floods, long-continued cold, cloudy weather, irregular seasons, deficiency of rainfall, excessive rainfall—the risk due to the last two alone is far more important to the Indian agriculturist than that due to all the other causes put together. Of the two causes connected with rainfall again, the effects of drought or deficiency in rainfall are far more important and extensive factors in agricultural operations than the occasional damage caused by excessive rain. In short, if the Indian agriculturist can count upon the fact, *viz.*, that the rainfall in his locality will not be below a certain number of inches by a specified date in the agricultural calendar, he is practically assured of having a crop not materially below the normal standard. The question is, whether the scientific principles of insurance may be applied in practice to guarantee to the Indian cultivator that if the requisite amount of rainfall does not come, he will be indemnified against the loss of crops arising from such deficiency.

Rain-insurance.

The fact that Indian agriculture depends almost exclusively on the amount and seasonableness of rainfall, leads to many disadvantages and embarrassments in the economic situation of the country. It makes the course of trade and commerce of the country uncertain to a great extent from year to year. It makes estimating in public finance "a gamble in rain," and consequently affects the continued and sustained prosecution of schemes of social and industrial reform. It makes the development of the whole country turn to a great extent on the fickle

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pivot of the monsoon. But in economic, as in other fields, circumstances which are greatly disadvantageous in some respects may be sources of distinct convenience from other standpoints. The fact that so much of the Indian economic system depends on one factor may be regarded as an advantage in studying its defects and deficiencies. It simplifies, to some extent, the task of coping with the situation in accordance with sound economic principles. If so much depends on rain, can we not insure it and get rid of the uncertainties attached to it, as has been done in respect of other kinds of risk? Is a system of rain insurance in India impossible or impracticable?

Rainfall the chief uncontrollable factor in Indian agriculture.

It may be freely admitted that rain-insurance in India will not be exactly identical with crop insurance. Causes of crop destruction other than drought will remain unprovided for. As rain-gauges cannot be fixed on every field, practical action will have to be taken with reference to comparatively large area-units and the inequalities within the same unit will have to be ignored. The compensation to be paid on the occurrence of a specified degree of deficiency in rainfall cannot be assessed on the actual loss in each case, but will have to be roughly fixed with reference to some such data as the assessment paid on the fields. It may yet be reasonably claimed, however, that under the circumstances of a great majority of Indian provinces and states generally, rain-insurance may be taken as an approximation to crop insurance close enough for all practical purposes. Most of the other factors which injure the cultivator's crops are such as he himself can prevent or counteract by his own exertions. An efficient agricultural department—almost all provinces and important states in India have got such a department now and development in this direction is receiving the earnest attention of all Indian administrators—can be of very great help to the cultivator in this respect. It is only the rainfall factor which is uncontrollable by human exertions. As there is no way at present of preventing this uncertainty, the only course left open is to mitigate its effects by the scientific application of methods relating to uncertainties and risks. It is thus seen that rain-insurance is a logical supplement to the ordinary means that exist for protecting crops and is not antagonistic to the adoption of such means.

Rain-insurance a rational supplement to existing methods of mitigating agricultural distress.

Let us consider the relation of a scheme of rain-insurance as contemplated here to the means that already exist for preventing or mitigating the effects of a general failure of crops. The result of such failure in ordinary cases is distress amongst the poorer classes, and in extreme cases, a famine. Various methods of famine protection and famine relief have emerged in British India, as the result of careful and earnest study on the part of administrations subjected to the painful experience of repeated and severe visitations. Many of these methods have been practically applied with very satisfactory and far-reaching results in improving the economic condition of the people. The most important of them are (*a*) extension of communications by railways, roads and canals, (*b*) development of irrigation,

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(*c*) encouragement of diversity of occupation and (*d*) adequate provision and preparedness on the part of Government for famine relief. There cannot be the least doubt that each of these methods goes a long way in preventing or mitigating the effects of a widespread failure of agriculture. But it would be a mistake to assert that any of these methods, or all of them put together, could do away with the necessity for Agricultural Insurance. A simple illustration will make this quite clear. The illustration that we take is the necessity for fire insurance in the case of, say, a factory. We may increase facilities for obtaining house-building material and machinery in the locality; we may take some mechanical or structural precautions against the spread of fire over the property; we may reduce and regulate inflammable and combustible stores; arrangements may exist even for erecting sheds for preserving such part of the property as may be left, in case the factory is destroyed by fire. But all the circumstances, corresponding fairly closely to the four methods for the prevention of crop failure and alleviation of its effects, cannot be said to do away with the necessity for insuring the property against the risk of destruction by fire. It will thus be seen that a system of crop insurance does not run counter to any scientific or administrative action that may be taken to protect crops or to mitigate the effects of crop failure. It only attempts to deal with that residual part of the difficult and complicated problem which cannot be solved by any other means.

It may be apprehended that a contract, the essential feature of which is that an insured person would be paid

Rain-insurance will *not* be gambling.

so much in case the total rainfall in his locality by a certain date falls short of a certain number of inches, is indistinguishable from gambling. In fact, many writers[1] have regarded all insurance as a form of gambling. No sadder mistake was ever committed by scientific writers and no worse confusion made between one of the greatest of economic blessings and one of the worst forms of human vice. As Willet has clearly explained, "Insurance is the *transfer* of risk, gambling the *creation* of risk." If an insurer made a contract with a person having no agricultural interest or other interest connected with rainfall to pay him a certain amount if the rainfall did not amount to a certain number of inches before a certain date or hour, *that* would be gambling, because it would involve the creation of some risk which did not exist. But if an agriculturist, who expects a fairly definite out-turn from his fields in the ordinary course in a season of normal rain-fall, feels the uncertainty of the rainfall of individual years as an economic disadvantage and embarrassment, and if an insurer agrees to relieve him of this uncertainty by a scientific application of the laws of risk-transfer, then the case is one of legitimate insurance and cannot be confounded with gambling, by any economist of clear perception.

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[1] "Let us now consider the working of insurance. In this case also the contract is a wager. A house owner pays an insurance company 50 dollars in return for which he is to receive 5,000 dollars in case his house burns down within a specified time just as he might pay a book-maker 50 dollars and receive 5,000 in case a specified horse wins the race."—Arthur T. Hadly, Economics, page 99, quoted by Willet.

Agency—the state most suitable.

The question may be raised as to what the agency should be to undertake a scheme of rain-insurance—whether it should be the state or local bodies like co-operative associations or a private enterprise of a capitalistic character. The question is an important one from the practical stand-point though it is comparatively immaterial from the point of view of principle. If it is conceded that a system of rain-insurance is economically desirable and financially practicable, the agency to work such a scheme is a matter of relative indifference, provided satisfactory and economic working in the interest of the agriculturist is assured. In the circumstances of Indian agriculture and in the present stage of development of the country, there can be little doubt that the work should be undertaken by the State. We do not here take our stand on the great mass of cogent and powerful reasoning by which numerous writers have sought to demonstrate (as many think successfully) that, in the best interests of the people, all insurance work should be undertaken by the State.[1] There are special reasons why, in the case under consideration, the State is the most suitable agency. No other agency will inspire such confidence in the mind of the people as the State; and perfect confidence of the agriculturist is an essential factor in the scheme. The importance of the scheme is too great to admit of its working being left to private enterprise in its present state of organization in India, and the magnitude of operations of even a moderately popular scheme will be too vast for many years to come for the capacities of our infant co-operative system. The scheme will have to be worked in very close co-operation with the revenue officers of Government who are in touch with the cultivators and it is only the State which can secure and command such co-operation. Perhaps, at a later stage, the work may, with advantage, be transferred to local co-operative societies under the supervision and guidance of the State; but the day when our co-operative societies will be able to take such responsibility, is yet far distant. Another benefit of State-working will be economy, as the existing establishment will be utilized to a considerable extent. The scheme should work on the principle of mutual insurance, the Government not deriving any pecuniary profit out of the business. In fact, as an encouragement to the scheme, the Government may bear the working expenses either permanently, or for a term of years to begin with, thus reserving the whole of the premium paid by the agriculturists to accumulate at interest for being utilized for the grant of compensation.

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[1] "Thousands are dissuaded from taking insurance, because they realize that they must pay for it excessive rates. A competitive system with its enormous re-duplication of solicitation, exists at the expense of the insured and bears most heavily on those most needing insurance and least able to bear unnecessary burdens. The State can provide for insurance at the very minimum of cost."—Lewis, State Insurance, page 50.

The arguments by which we have been led to discuss the form of Agricultural Insurance dealt with in this chapter may now be summarized.

Summary.

Agriculture being the foremost industry in an Indian State, Agricultural Insurance is of the utmost importance. Of the three parts of Agricultural Insurance, *viz.*, (*a*) insurance of house, granary, and implements, (*b*) cattle insurance, and (*c*) crop insurance, we would leave out of account the first as of minor importance and would leave the second to the co-operative societies to cope with, as far as possible. The third part, *viz.*, crop insurance, presents great difficulties which in most countries are almost insuperable. But the peculiarity of Indian agricultural conditions makes a simple scheme of rain-insurance, identical in its results, for all practical purposes, with a scheme of crop insurance. Such a scheme of rain-insurance satisfies all the conditions of legitimate insurance and cannot be confused with gambling. It is a logical economic supplement to the other means that have been advocated and adopted for preventing and coping with agricultural distress. We have also tried to shew that, under the present circumstances of the country, the State is the most suitable agency to undertake a scheme of this character.

In the following chapters, we shall try to formulate a practical scheme suitable for an Indian State, and taking the actual rainfall tables and revenue statistics of the Mysore State as basis, shall try to work out what the financial result would have been if such a scheme had been in existence in the past.

CHAPTER II.

The Local Basis.

Agricultural Insurance is desirable and, as rain-insurance, is possible.

IN the foregoing chapter the importance of introducing a system of Agricultural Insurance in India was considered. It was found that the subject was full of difficulties, both in its theoretical and practical aspects and that owing to such difficulties, the problem of Agricultural Insurance had not made sufficient progress in any country. In India, however, agriculture was seen to depend to a very great extent on one factor, *viz.*, rainfall, and this peculiarity of Indian agriculture, while a disadvantage in many ways, made the question of Agricultural Insurance easier of solution. A scheme of rain-insurance, while much simpler, would, in India, very nearly secure all the benefits of Agricultural Insurance. It was proved that a scheme of rain-insurance did not run counter to scientific or administrative measures for mitigating crop failures and their effects but was supplementary to them.

An essential condition of practicability—a suitable local basis.

In order that Agricultural Insurance in the form of rain-insurance may be practicable in a Province or State, it is necessary that sufficiently large area-units should be found over which rainfall and agricultural conditions should be uniform. In this

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chapter it is shewn how such area-units can be found by a thorough study of rainfall statistics compiled in forms specially devised for the purpose. At the same time, by way of illustration, it is proved that, with a few exceptions, the *taluk* satisfies the conditions of a suitable area-unit and may well form the local basis of a system of Agricultural Insurance for the Mysore State.

What is a local basis ?

The area-unit we want to arrive at, is the area that may be taken as the unit of operation for purposes of fixing the rates of premium, the conditions under which benefits will accrue and the magnitude of such benefits, in a system of Agricultural Insurance. The subject is of great importance, specially as regards the practical aspect of Agricultural Insurance. For, unless it is possible to deal with fairly large areas on a uniform basis of rates and conditions, the scheme would become unworkable. Different rates of premia and benefits and different conditions under which benefits would accrue, cannot be laid down for each field or each village. The arguments advanced in this chapter are of a general nature; but, for facility of understanding and for purposes of illustration, facts and figures relating to the Mysore State have been dealt with and a practical conclusion arrived at with reference to the actual conditions prevailing in that area.

A suitable local basis not essential for *financial* soundness.

In the first place, it may be made clear that it is not the *financial* soundness of a scheme of Agricultural Insurance that depends on the adoption of a suitable area-unit as the basis of working out rates and

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conditions. If the rates of premium and benefits and the conditions under which benefits should accrue are correctly determined on the basis of reliable statistics, the system will be *financially* sound whatever area-unit is chosen. For example, if the whole of the Mysore State be taken as the area-unit and the rainfall statistics at the Central Observatory in Bangalore be adopted as the basis of calculations, there will be no *financial* unsoundness in the scheme. The insurance agreement will be to the effect that the insured will pay a certain premium per annum to the insurer and if the rainfall at the Bangalore Central Observatory by a certain date in the agricultural calendar is less than a certain number of inches, the insurer will pay to the insured a sum amounting to so many times the annual premium. If the rainfall statistics at the Bangalore Central Observatory are available for a sufficiently long period and if the rate of premium and the amount of bonus are carefully adjusted to each other in accordance with the mathematical laws of probability, the system will be financially sound irrespective of the circumstances as regards rainfall and agricultural conditions of the locality to which the insured may belong.

But important as regards the *economic* aspect.

But though there will be no undue financial risk to the insurer or unfairness to the insured by adopting a whole Province or State with widely varying conditions of rainfall in different parts as the area-unit of a system of Agricultural Insurance for fixing rates, etc., there are strong *economic* objections to the adoption of such an area for the purpose. When the amount and distribution of rainfall differ greatly between one part of a tract and another, the relation of agriculture to rain also differs. The fatal defect in adopting such an area as unit would be that, in many cases, relief would not even approximately correspond to agricultural loss; and the system, losing the character of insurance, would become gambling. It may be thought that the agricultural conditions of each locality are adapted to the amount of its average rainfall and that the important factor to consider is not the absolute amount of rainfall in any particular year but the percentage of deviation from the average. It may therefore be argued that diversity in the amount of average annual rainfall need not itself be an insuperable difficulty in the way of taking a large area as the unit for determining rates and conditions for purposes of Agricultural Insurance. This argument is theoretically correct to some extent. But even then, a large area can be taken as unit only if two important conditions are satisfied in respect of it. In the first place, as relief in case of deficiency in rain-fall is to be the same all over the area, it must be such that the percentage of variation of rainfall from the normal in any year is, generally speaking, uniform in all parts. Also, the same percentage of variation in rainfall should affect agriculture to the same extent all over the area. As a matter of fact, we cannot easily find any area over which the amount of annual rainfall varies greatly, satisfying these conditions. The prospect of simplifying the practical side of Agricultural Insurance to the maximum extent by adopting

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a whole Province or State of considerable magnitude as the unit for purposes of fixing rates and conditions, has therefore to be regarded as unattainable in most cases. As a general rule, it is in respect of small compact areas over which the average annual amount of rainfall and its distribution are fairly uniform that we find the two foregoing conditions also satisfied. It is over such small areas of nearly equal rainfall that we can hope to find the percentage of variation of rainfall in any year from the normal approximately uniform, and the same percentage of deficiency producing in all parts about the same effect on agriculture.

A concrete illustration will make the meaning of the foregoing paragraphs quite clear. The average annual rainfall in several parts of the Mysore State varies greatly from 15·09 inches at Nayakanhatti in Chitaldrug to 321·86 inches at Agumbi in the Shimoga District. The average annual rainfall as measured at the Bangalore Central Observatory is 36·78 inches. It is true that the great diversity between these figures does not by itself prevent us from taking the whole State as the unit and fixing the rates and conditions with reference to the rain precipitation as measured in the Bangalore Central Observatory. For example, the essential features of the scheme may be that if the rainfall from January to December in any particular year at the Bangalore Central Observatory is less than 24·52 inches (two-thirds of average) each insured agriculturist will be paid ten times the amount of his annual premium. If the number of years in which this degree of deficiency takes

A concrete illustration.

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place at Bangalore is one in ten as ascertained from the records of a sufficiently large number of years, then the scheme will be a perfectly sound one *financially*, involving neither undue risk to the insurer nor unnecessary loss to the insured. Whether the insured belongs to parched Nayakanhatti or deluged Agumbi has no bearing on the financial aspect and financial safety of the scheme. Also, it may be urged that in a year in which the rainfall at the Bangalore Observatory is below 24·52 inches, *i.e.*, in defect of the average by more than 33⅓ per cent, the precipitation at Nayakanhatti may be expected to be below $\frac{2}{3} \times 15{\cdot}09$ or 10·06 inches and that at Agumbi below $\frac{2}{3} \times 321{\cdot}86$ or 214·53 inches. The agricultural system of each place having been adapted to its rainfall, it may be argued that agriculturists at Nayakanhatti and Agumbi will suffer from the deficiency in the same way as the people in Bangalore and will require similar relief. Of course, if these two assumptions were correct generally, there would be no objection to adopt the whole of the Mysore State as a single area-unit. But an examination of the rainfall statistics will shew that they do not hold good generally. The rainfall in different parts of the State depends to a great extent on different meteorological and physiographical factors which, when variable, do not always move in the same direction. While there is a serious defect in Bangalore, there may be a considerable excess at Agumbi or Nayakanhatti, and *vice versa*. Again, a defect of 33 per cent from the average in the low aggregate of Nayakanhatti may be disastrous to agriculture while a defect of that percent-

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age may not prejudicially affect agriculture in tracts about Agumbi at all. It will thus be seen that if we give relief to the cultivators near Agumbi or Nayakanhatti on the basis of deficiency in rainfall as measured at Bangalore, the transaction will be more of the nature of gambling than insurance; for, in the first place, there may not have been any deficiency in rainfall requiring relief in those localities; and in the second place, even if there has been proportionate deficiency, it may not have produced anything like the same result on agriculture.

Ideal method of fixing local basis.

A rational system of Agricultural Insurance then would require for an ideal local basis the mapping out of the country into areas over each of which the following conditions would be satisfied:—

(*a*) The average annual rainfall should be about the same all over the area and its distribution in time also about the same.

(*b*) The percentage of variation in rainfall from the annual average in any year all over the area should be approximately uniform.

(*c*) The same percentage of variation in rainfall should affect agriculture similarly and to the same extent in all parts.

Some deviation from the ideal method necessary to avoid working difficulties.

It is not impossible to prepare such a map of Mysore or any other tract, but the process would be laborious. Moreover, the working of an insurance scheme on a local basis altogether different from the administrative units would be inconvenient and confusing even if it were practicable.

Taking all circumstances into account, it seems desirable to be satisfied, for purposes of rain-insurance, with a fairly workable area-unit which will coincide with a clearly defined and well-recognized administrative unit, rather than aim at one which, though more suitable from the point of view of insurance, would present almost insuperable difficulties in working.

Will any existing administrative units do?

The well-recognized administrative area-units in Mysore are the State, the District and the Taluk. Subdivisions consisting of groups of taluks have been created for revenue and other administrative purposes but they do not represent so well-defined an area-unit as the other three. The area of the whole State being 29,461 square miles, the average area of a District is 3,683 square miles and the average area of a Taluk 433 square miles. Roughly speaking, the whole State is equal in area to a circle of 97 miles' radius, a District to a circle of 34 miles' radius and a Taluk to one of 12 miles' radius. We shall consider in turn whether any of these area-units can be adopted as the local basis of a system of Agricultural Insurance. It may be mentioned here that in a flat tract of country, even such a large area as that of the Mysore State may, in some instances, be found to have sufficient uniformity in rainfall and agricultural conditions and the whole tract may, in those cases, be taken as a unit for purposes of Agricultural Insurance. But in a hilly table-land like Mysore, the conditions of rainfall may differ greatly in places within a few miles of one another and this makes it difficult to fix a workable local basis for Agricultural Insurance in such a country.

As has been indicated already, the whole of the Mysore State cannot be a suitable area-unit. The range of average annual rainfall over the State will be seen from the following figures :—

The whole State unsuitable as an area-unit.

	Inches
Nayakanhatti, Challakere taluk, Chitaldrug district	15·09
Hoskote, Pavagada taluk, Tumkur district ..	20·05
Goribidnur, Kolar district	25·44
Bangalore Observatory Station	36·78
Kakankote, Heggaddevankote taluk, Mysore district	49·83
Arehalli, Belur taluk, Hassan district ..	72·84
Hanbal, Manjarabad taluk, Hassan district ..	126·36
Kotgehar, Mudgere taluk, Kadur district ..	211·91
Agumbi, Tirthahalli taluk, Shimoga district ..	321·86

Not only is the annual amount of rainfall vastly different in different parts, but the percentages of variation from the average in any year are also widely divergent. This will be clear from the following statement in which the percentages of variation of the actual rainfall in 1910 in the several stations referred to above from the average up to that year are calculated :—

Station	Actual rainfall in 1910	Annual average rainfall up to that year	Variation	Percentage of variation on average
Nayakanhatti ..	28·61	14·19	+14·42	+102
Hoskote	24·95	19·91	+ 5·04	+ 25
Goribidnur ..	39·19	25·06	+14·13	+ 56
Bangalore Observatory Station ..	46·08	36·49	+ 9·59	+ 26

Station	Actual rainfall in 1910	Annual average rainfall up to that year	Variation	Percentage of variation on average
Kakankote ..	35·02	50·13	—15·11	— 30
Arehalli	86·47	67·53	+18·94	+ 28
Hanbal	128·36	120·24	+ 8·12	+ 7
Kotgehar ..	217·16	212·59	+ 4·57	+ 2
Agumbi	269·11	330·14	—61·03	— 18

It is seen from the foregoing statement that in 1910 while the rainfall at Nayakanhatti was about 102 per cent in excess of the average, that at Kakankote was 30 per cent in defect and all stages of variation over this range of 132 per cent are represented. It is obviously impossible to treat uniformly, for purposes of Agricultural Insurance, an area over which the average annual rainfall varies by about 2,000 per cent and the percentage of deviation from the normal in any year may be in opposite directions and cover a range of over 130 per cent.

The district unsuitable.

Next, let us consider the case of the administrative district. The western districts of Shimoga, Kadur, and Hassan are each composed partly of *malnad* and partly of *maidan* tracts and the average annual rainfall over each varies greatly from part to part. The following figures will shew the correctness of this statement :—

District		Taluk headquarters of minimum rainfall and average rainfall, 1899-1912	Taluk headquarters of maximum rainfall and average rainfall, 1899-1912	Variation percentage
Shimoga	..	Honnali 22·35 ..	Nagar 200·95 ..	799
Kadur	..	Kadur 23.47 ..	Sringeri 152·93 ..	552
Hassan	..	Hole-Narsipur 27·63	Manjarabad 89·14..	223

Over the *maidan* districts, however, the variation from part to part of the average annual rainfall is not great as may be seen from the following figures :—

District	Taluk headquarters of minimum rainfall and average rainfall, 1899-1912	Taluk headquarters of maximum rainfall and average rainfall, 1899-1912	Variation percentage	Variation percentage excluding the erratic taluk or taluks
Bangalore	Hoskote 30·57 ..	Anekal 36·62 ..	20	..
Kolar ..	Bagepalli 24·05 ..	Gudibanda 31·35 ..	30	15
	Kolar 27·37 ..			
Tumkur..	Pavagada 20·65 ..	Tumkur 36.17 ..	75	37
	Sira 23·21 ..	Kunigal 31·82 ..		
Chitaldrug	Challakere 17·32 ..	Davangere 24·86 ..	44	25
	Hiriyur 19·97 ..			
Mysore ..	Gundlupet 24·74 ..	Heggaddevankote 36·12.	46	26
		Hunsur 31·23 ..		

It may, therefore, be thought that the *maidan* districts as they are, and the *malnad* districts divided into two parts each, *viz.*, the *malnad* portion and the *maidan* portion, may serve as suitable units for rainfall or Agricultural Insurance.

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But let us consider the variation within the district from one part to another of the percentage of excess over or deficiency from the average in any particular year. This variation is more important for our purposes than the absolute amount. Taking the rainfall in the Chitaldrug district in 1910 for illustration and confining our attention to the several taluk headquarters only, we calculate the deviation from the average as shewn below :—

CHITALDRUG DISTRICT, 1910.

Names of taluks	Actual in 1910	Average	Deviation in inches	Percentage of deviation on average
Chitaldrug Observatory	35·17	24·81	+10·36	+ 41
Challakere ..	19·46	17·31	+ 2·15	+ 12
Hiriyur	36·14	17·65	+18·49	+104
Holalkere ..	29·07	25·00	+ 4·07	+ 16
Davangere ..	30·47	21·57	+ 8·90	+ 41
Molakalmuru ..	29·76	21·83	+ 7·93	+ 36
Jagalur	29·44	19·15	+10·29	+ 53
Hosdurga ..	39·60	22·09	+17·51	+ 79
Harihar	26·53	20·99	+ 5·54	+ 26

The year 1910 was a year of copious rainfall and all the stations in the Chitaldrug district shew excess over the average. But the excess varies from 12 per cent in Challakere to 104 per cent in Hiriyur. The range is 92 per cent. The variation figures are, as may be expected, more uniform in this case than those in respect of the whole Province which shewed a range of

132 per cent, but they are not sufficiently uniform to make the Chitaldrug district a suitable area-unit for purposes of Agricultural Insurance.

To take the illustration of a year in which the rainfall was below average, we work out below the figures of the Tumkur district for the year 1908. It will be seen that the deficiency varies from 16 per cent to 60 per cent. all intermediate stages being represented.

TUMKUR DISTRICT, 1908.

Names of taluks	Actual in 1908	Average	Deviation in inches	Percentage of deviation on average
Tumkur Civil Hospital	24·14	35·39	—11·25	—32
Maddagiri ..	18·25	21·66	— 3·41	—16
Chiknayakanhalli ..	14·76	24·14	— 9·38	—39
Sira	18·04	22·80	— 4·76	—21
Gubbi	22·54	30·19	— 7·65	—25
Tiptur	10·82	27·01	—16·19	—60
Pavagada ..	10·16	19·23	— 9·07	—47
Kunigal	12·73	30·32	—17·59	—58
Koratagere ..	14·03	22·69	— 8·66	—38
Turuvekere ..	12·08	25·59	—13·51	—53

A careful study of similar tables prepared in respect of all the districts of the Mysore state for a large number of years leads to the conclusion that though, on the whole, the rainfall over a district in any particular year shews a general tendency towards excess or deficiency, the range of variation is wide and the agricultural conditions for the year in different parts of the district cannot be regarded as even approximately uniform for purposes of affording relief.

The taluk suitable.

We now come to the *taluk*. The average area of a taluk in Mysore is equal to that of a circle of 12 miles' radius. In reality, the area varies from 190 square miles in the case of Anekal taluk to 796 miles in that of Challakere. These extremes represent circles of about 8 to 16 miles' radius respectively. Tables have been prepared in respect of a large number of taluks and for a large number of years shewing the average rainfall and also the percentages of variation from the average in different parts. A careful study of these tables shews that, though in some cases there is not such a degree of closeness in the figures for different parts of the taluk as the smallness of the area would lead us to expect, there is sufficient uniformity, on the whole, to justify the taluk being adopted, with necessary precautions and corrections, as the local basis for working a system of Agricultural Insurance. The following tables illustrate the point :—

MAGADI TALUK, 1910.

Names of stations	Actual in 1910	Average	Variation	Percentage of variation on average
Magadi ..	41·38	31·41	+ 9·97	+32
Tavarekere ..	41·57	30·93	+10·64	+34
Soluru	41·09	29·11	+11.98	+41

MAGADI TALUK, 1911.

Names of stations	Actual in 1911	Average	Variation	Percentage of variation on average
Magadi	26·99	31·65	—4·66	—15
Tavarekere ..	23·45	31·56	—8·11	—26
Soluru	24·59	29·78	—5·19	—17

SRINIVASPUR TALUK, 1908.

Names of stations	Actual in 1908	Average	Variation	Percentage of variation on average
Srinivaspur ..	14·79	27·71	—12·92	—47
Royalpad ..	14·36	28·44	—14·08	—50
Tadgal	14·88	27·58	—12·70	—46
Pulugurakota ..	15·45	26·71	—11·26	—42

SRINIVASPUR TALUK, 1909.

Names of stations	Actual in 1909	Average	Variation	Percentage of variation on average
Srinivaspur ..	31·14	27·80	+3·34	+12
Royalpad ..	37·87	29·07	+8·80	+30
Tadgal	31·48	27·84	+3·64	+13
Pulugurakota ..	36·80	27·38	+9·42	+34

MANDYA TALUK, 1912.

Names of stations	Actual in 1912	Average	Variation	Percentage of variation on average
Mandya	19·83	29·47	—9·64	—33
Basaralu	21·81	26·25	—4·44	—17
Koppa	24·27	29·00	—4·73	—16
Maddur	36·56	31·27	+5·29	+17

MANDYA TALUK, 1913.

Names of stations	Actual in 1913	Average	Variations	Percentage of variation on average
Mandya	25·61	29·25	—3·64	—12
Basaralu	20·55	25·99	—5·44	—21
Koppa	19·23	28·76	—9·53	—33
Maddur	21·64	31·53	—9·89	—31

It will be seen from the foregoing tables that in the case of taluks, not only is the average annual rainfall fairly uniform over the whole area but the deviation from the normal, either excess or deficiency, in any particular year also varies within a comparatively small range.

Of course, there are taluks which are exceptions. Though a taluk is a small area, some of the Mysore taluks, specially those in the *malnad* area, contain tracts which vary widely from one another in the matter of rainfall and other physical conditions. For example, in the Chikmagalur taluk the rainfall varies from 28·88 inches in Kalasapur to 96·24 in Attigundi, and in the Sagar taluk, the range is from 58·76 inches in Anantapur to 225·45 at Aralagode. Fortunately, such wide divergence is noticeable chiefly in *malnad* taluks of heavy rainfall in which population is sparse and a divergence from the conditions of an ideal local basis a matter of comparatively less importance. In many such cases, moreover, it will be possible to include those *hoblies* (sub-divisions of taluks) of a *malnad* taluk in which the rainfall is not excessive as parts of an adjacent *maidan* taluk for purposes of rain-insurance.

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In the case of *maidan* taluks also, a study of the tables of rainfall and of percentages of deviation from the normal rainfall of the precipitation of individual years will disclose some cases of erratic local distribution. It cannot be claimed that in the case of a scheme of rain-insurance on the taluk basis, every insured field which receives less than the requisite amount of rain will invariably get relief. Nor can it be assured, on the other hand, that in some cases benefit will not go to fields which have received more than the requisite amount of rain. As the distribution of benefit will be guided by the reading of the guage at taluk headquarters, any great disparity in local distribution of rainfall within the taluk may lead to anomalies, either in the direction of undue gain or of unfair loss to the insured *raiyat*, in individual cases. But we have seen that the rainfall over a *maidan* taluk is, generally speaking, uniform and that pronounced variations from the average in a particular year are usually in the same direction and approximately to the same extent. The conditions of agriculture and the relation of rain to agriculture do not also, as a general rule, materially differ over different parts of the same taluk. A system of rain-insurance on the taluk basis will therefore work fairly well in respect of the bulk of the insured and afford relief to a large number of cases in which it is really needed.

The taluk basis, though not ideal, is the best that can be adopted.

We have already seen that the *financial* soundness of a scheme of rain-insurance is independent of its

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local basis. From this point of view, therefore, there is nothing to be said against the taluk as an area-unit. From the point of view of *actual working*, the taluk which is the best recognized area-unit for revenue purposes with a separate establishment intimately in touch with the *raiyat* population, is eminently suitable. We have just seen that, from the *economic* standpoint of insurance as protection against risk, the taluk, if not the ideal unit, is good enough for practical purposes; for, under a system of rain-insurance worked on the taluk basis with necessary precautions, relief will, in the great majority of cases, be afforded in respect of fields in which there is serious agricultural loss owing to deficient rainfall. The question of finding a suitable local basis for Agricultural Insurance may therefore be regarded as solved in the case of the Mysore state. As Mysore with its vastly varying physical and rainfall conditions is one of the most difficult tracts to deal with in respect of such a question, there can be little doubt that in the case of any other province or state in India, investigations on the lines indicated in this chapter will lead to the discovery of a suitable local basis for purposes of Agricultural Insurance.

CHAPTER III.

Rainfall Statistics.

In the first chapter it was proved that, under the peculiar circumstances of Indian agriculture, Agricultural Insurance in the modified form of rain-insurance was practicable. In the second chapter it was established that, for a system of rain-insurance, it would not be necessary to fix rain-guages in every field or village and that a system of rain-insurance with the taluk as local basis would give fairly satisfactory results in Mysore. In the present chapter, we shall demonstrate that, so far as the Mysore state is concerned, the available rainfall statistics are adequate and are sufficiently accurate to form the basis of a system of Agricultural Insurance or rain-insurance.

Reliable and adequate rainfall statistics necessary for rain-insurance.

In order that rain-insurance may be possible, we must have reliable rainfall statistics for a fairly long period. To think of rain-insurance without proper rainfall tables would be like contemplating a scheme of life insurance without mortality tables. In the present chapter we shall examine how we stand in relation to this matter. We shall first of all examine the nature of the mechanical appliances which are used for measuring rain. The human agency that is employed for observing, recording, tabulating and publishing the results will then be considered. It

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will be necessary in the next place to find out for what length of time rainfall data are available. After all these points have been examined, we shall have to consider in a scientific spirit as to whether the material available is suitable and adequate for our purposes, *i.e.*, to serve as basis for a system of rain-insurance. As in the previous chapters, we shall take the facts and figures relating to the Mysore state for detailed consideration and for drawing definite conclusions.

The British Indian rain-gauge.

Rainfall is measured in Mysore, as elsewhere, by means of an apparatus which is known as the rain-gauge. The nature of this apparatus has remained practically unchanged during the last fifty years. It consists of five parts, *viz.*, the funnel, the cylinder, the receiver, the base and the measure glass. The receiver is generally a glass bottle and is placed inside the cylinder which is usually made of galvanized iron. The funnel which is also made of galvanized iron is so placed as to fit tightly into the mouth of the cylinder with its stem projecting into the receiving bottle. By this arrangement, all the rain water which falls into the common mouth of the cylinder and the funnel goes into the receiving bottle. The bottle itself being inside the cylinder, loss of collected water by way of evaporation is avoided. The cylinder with the receiver inside and the funnel fixed at the top, fits into the base which is also made of galvanized iron. The measuring glass is a special cylindrical glass graduated for cents, *i.e.*, hundredth parts of an inch, and is capable of holding fifty cents or half an inch of rain falling into the funnel. The rim of the funnel should be

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perfectly circular and in order that it may retain this shape this part of the funnel is generally strengthened by a brass ring. The base of the rain-gauge is firmly fixed with mortar into the top of a brick or stone pedestal. The mouth of the funnel should be quite level and the situation of the rain-gauge should be such that no trees or buildings may be within thirty yards from it.

The Mysore rain-gauge.

The foregoing description applies to the ordinary rain-gauges used in British India. The apparatus used in Mysore has some peculiarities. In British Indian gauges the inner diameter of the funnel rim is five inches. But in Mysore, it is 4·7 inches. The advantage of the Mysore system is that if the special measure glass of a rain-gauge is not available, an ordinary apothecary's ounce glass may be used, ten cents of rain falling into the mouth of the funnel corresponding to one ounce of water. Again, in the British Indian instrument, the funnel, the cylinder and the base are separate pieces; but in Mysore all the three form one piece, *viz.*, a cylindrical box with a base, the funnel forming a hinged lid which can be locked with an ordinary padlock. Another point of difference in Mysore is that instead of a glass bottle, a galvanized iron vessel is used as the receiver. The Mysore contrivance is ingenious and has some advantages. But as, in it the base, the cylinder and the funnel form one piece, if any one of these parts gets damaged, the whole has to be changed or removed for repair. In British India, the parts are separate and any one part can be replaced. In Mysore the height of the funnel rim when the rain-gauge is fixed

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in its position on the pedestal is three feet from the ground; in British India a height of one foot above the ground level is generally preferred. In British India rain-gauges or component parts are supplied by the Mathematical Instruments Office at Calcutta on indents signed by the indenting officers and countersigned by the provincial controlling officer. For the Mysore state, the Meteorological Department gets the rain-gauges made in a private workshop at Bangalore, the measure glasses only being imported from England.

Measurement and record.

The rain-gauge is examined at 8 o'clock every morning by a person appointed for the purpose, whether there has been rain or not during the previous 24 hours. In the Mysore State one of the taluk officials at taluk stations and a police *dafadar* or some other official at other stations is generally entrusted with this work as a part of his regular duties. The observer takes the receiver from the cylinder and pours out the water in it, if any, into the measure glass and reads the graduation marks. Immediately afterwards he enters the result of his observation in the daily rainfall register. Each page of this register has got twelve vertical columns one for each month of the year. The rainfall for each day of a month is recorded in its proper cage in the column appertaining to the month. The monthly total is arrived at by adding up the column and is entered at the bottom of the column. One page of this register is sufficient for a whole year and a single register suffices for many years. This register is the primary rainfall record and is the basis of all rainfall statistics. When the observer records his observation in this register, he fills up at the same time three post cards, one addressed to the Deputy Commissioner, one to the Revenue Commissioner and the other to the Meteorological Reporter giving the date, the rainfall as measured by him from 8 A.M. of the previous day to 8 A.M. of the day of report and the name and designation of the reporter. If the station is not a taluk headquarters station, a fourth copy of the card is filled up and posted to the Amildar of the taluk. In times of drought when there is anxiety about the seasonal conditions, special instructions are issued to the observer to fill up a fifth copy of the card and post it direct to Government. These cards are posted only on days on which there is actual rainfall to report. The absence of a report for any day signifies that there has been no rain during the day.

Control.

In the Mysore state there are (1st January 1914) 223 rain-gauge stations. In Bangalore city there are five rain-gauges, in Mysore city six, at Hassan three, and at Shimoga two. If these extra rain-gauges at the several stations be taken into account, it will be seen that the total number of rain-gauges in the state is 235. Of these 235 rain-gauges, 20 are at district headquarters, 69 at taluk and sub-taluk headquarters and the remaining at stations in the interior. These rain-gauges are under the control of the Revenue Department and the inspection of rain-gauges is carried out by revenue officers. Each gauge is expected to be inspected at least once a year. The Meteorological Reporter keeps the reserve stock of rain-gauges, measure glasses, etc., in the Central

Observatory at Bangalore and gives technical advice whenever necessary. He also publishes the annual rainfall registration report which is a valuable record and to which reference will be made later on.

Compilation and publication.

We shall now see how the observations made every day at the rain-gauge stations are compiled and published. In the Mysore state there are two different departments which publish rainfall statistics, *viz.*, the Revenue Department and the Meteorological Department. Both depend for information on the same initial source, *viz.*, the record made by the observer in his register. As it is important for us to have an idea of the degree of accuracy of the available rainfall statistics published by both the departments, we shall examine in detail the method adopted and the staff employed for compiling the statistics in the form in which they are published.

The Revenue Department.

The Revenue Department publishes the rainfall statistics for the whole state weekly, monthly and annually. This is done by the Revenue Commissioner. Half-yearly returns are also compiled in some instances but they are not published. The weekly rainfall return published by the Revenue Commissioner appears in Part V of the *Mysore Gazette.* It concerns itself only with the rainfall observations at taluk and sub-taluk headquarters and does not record the rainfall at stations in the interior. Thus, it gives the particulars of only 78 out of 235 rain-gauges in the State. This is the case also with the monthly and annual rainfall

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returns published by the Revenue Department. In the weekly statement, the rainfall during the week is given and for purposes of comparison, the average rainfall in the corresponding week for the last ten years is also shewn. The total rainfall from the 1st January to the end of the week is also given and the corresponding average figure for the last ten years is also shewn. In the monthly rainfall return published by the Revenue Department the rainfall for each day of the month is recorded and the total for the month is also shewn. In the annual statement, the rainfall during each month of the year is shewn in separate columns and the annual total for each station worked out. For the purpose of these returns, the week begins and ends at 8 o'clock on Saturdays. The month is the calendar month and the year is the calendar year.

The general method adopted in the Revenue Department for preparing these weekly, monthly and annual statements of rainfall for the whole state is described below.

The observer furnishes the return for his station to the taluk office. The taluk Amildar submits the returns appertaining to his taluk to the Deputy Commissioner. The Deputy Commissioner puts in one form the information received from all the taluks in the district and submits the statement to the Revenue Commissioner. The Revenue Commissioner compiles the figures received from all districts into a single statement and publishes the information in the *Gazette*. At all stages, *viz.*, in the taluk office, in the district office and in the Revenue Commissioner's office, endeavour is made to check the information in the periodical statement with the figures contained in the daily cards received direct from the observer. For this purpose the rainfall as communicated through the daily cards is posted in suitable registers in the several offices. As a general rule, however, the system may be described as getting the returns in the form in which they are finally published prepared by the observers from their initial records, and compiled and consolidated by stages by the several intermediate offices, the daily cards being used only for *checking* purposes.

The Meteorological Department.

The Meteorological Department publishes only one annual report on rainfall registration. This report deals with the number and inspection of rain-gauge stations, the greatest rainfall in 24 hours at each station, the district distribution of monthly, seasonal and yearly rainfall, the *nakshatra* distribution of rainfall, and rainfall according to river basins. The report is accompanied by six valuable tables as described below :—

Table I.—Monthly rainfall for the year at the rain-gauge stations.

Class A, at taluk headquarters.

Class B, at additional villages.

Table II.—Average monthly rainfall for the past years since 1870 at each of the class A stations, and for the years since 1893 at each of the class B stations.

Table III.—The seasonal rainfall for the year and average since 1870.

Table IV.—Yearly rainfall for the years since 1899 and average for the past years since 1889.

Table V.—District mean monthly rainfall for the year and average since 1870.

Table VI.—District mean seasonal rainfall for the year and average since 1870.

For the purpose of compiling this annual report the Meteorological Department gets from each observer, through the Deputy Commissioner, a copy of the page of the daily rainfall register appertaining to the year. Lately, the system has been introduced of requiring the observers to send a card direct to the Meteorological Reporter on days on which there is rainfall. But these cards are used only for checking purposes, the Meteorological Department depending chiefly on the consolidated annual return of the observer, *i.e.*, a copy of the page of his daily rainfall register, for the compilation of the annual report.

We shall now briefly indicate the periods for which statistics are available for the several parts of the Mysore state.

(*a*) In Volume XIV of the Indian Meteorological Memoirs published under the direction of Mr. (afterwards Sir John) Eliot in 1902, the monthly rainfall at each district headquarters of the Mysore state is given for the years noted below :—

Names of district headquarters	Page of Memoir	Years	Remarks
Shimoga	546-547	1837-1900	
Chitaldrug	548	1870-1900	
Chikmagalur ..	549	1870-1900	
Hassan	550	1871-1900	
Tumkur	551-552	1837-1900	1861-1869 wanting.

Names of district headquarters	Page of Memoir	Years	Remarks
Bangalore	553-554	1835-1900	1836 not on record.
Kolar	555	1870-1900	
Mysore	558-559	1837-1900	

It will be seen that in four instances, *viz.*, Bangalore, Mysore, Tumkur and Shimoga, statistics for nearly eighty years are available. In Vol. XXII, Part 1, of the Indian Meteorological Department Memoirs published under the direction of Mr. G. T. Walker in 1913, monthly and annual rainfall normals for all the taluk and sub-taluk headquarters in the Mysore state are given, the figures being calculated on the average of a number of years varying from 24 to 41. The figures in the latter memoir are, however, taken from the Mysore Meteorological Department annual reports and the memoir cannot therefore be regarded as an original source of information.

(*b*) The Mysore Meteorological Department was created in 1892 and the annual report on rainfall registration published every year since 1893, contains a record of monthly rainfall and average monthly rainfall for all stations. The manuscript records of the department contain complete information regarding rainfall *on any day* at any station from 1893 onwards. Monthly rainfall figures for 1892 and previous years are not available in all cases in the records of the Meteorological Department. But in some cases, in the records of that department, monthly rainfall figures for a varying period from

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1892 backwards are available and the period extends, in some cases, so far back as to 1870. It has to be particularly mentioned in connection with the Meteorological Department records that though, in many cases, the average for taluk and sub-taluk stations is given for the period commencing from 1870, *e.g.*, for 43 years in 1912, the actual figures for each year from which this average is calculated are not available for the whole period. The explanation given is that when the department was formed in 1892, it got the average figures from 1870 to 1892, without the detailed figures on which these averages were calculated. Since then, the average has been brought up-to-date each year by taking into account the rainfall of that year, the starting figure for the average from the beginning up to 1892 being, of course, taken on trust.

(*c*) As has been already stated above, the rainfall statistics published by the Revenue Department contain details only for taluk and sub-taluk headquarters. They contain no information about the rain-gauges at out-stations. It has been found possible to prepare tables from the Revenue Department publications, giving the monthly rainfall at all taluk and sub-taluk stations for all years commencing from 1886. It is not found practicable to go back further on account of the published returns being incomplete as regards some of the stations.

From what is stated in the foregoing paragraph, it is clear that the rainfall data available for the several parts of the Mysore State are scattered over a number of publications

Necessity for printing and preserving all

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available rainfall statistics.

published at different times. In a valuable note dated the 8th December 1903, reviewing the history of statistical work in the Mysore State, Mr. (afterwards Pradhàna-Siromani) T. Ananda Rao, then Director of Statistics, made the following remark :—

"Besides the annual compilations of district reports abovementioned, Mr. Ricketts' office compiled all available rainfall statistics for all rain-gauge stations for 20 or 25 years, a special temporary establishment being entertained for this work. This was a most useful compilation as it formed the basis of past years' average taken for comparison with the current statistics of ensuing years."

It does not appear that Mr. Ricketts' compilation of rainfall statistics was published; for Mr. Ananda Rao who appended to his note a list of all printed and published papers referred to therein, did not include this in his list. My endeavours to unearth this valuable compilation in the Secretariat records and in the records of the Director of Statistics have so far proved fruitless. In any case, it seems very desirable that all available material relating to the rainfall statistics of Mysore should be arranged and printed in the shape of a handy volume for purposes of reference and investigation. The want of such a publication was very much felt during the present investigation and material available in the various publications had to be specially tabulated in a form suitable for study.

By bringing together materials available from all sources, it has been found that details of monthly rainfall

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are available for taluk and sub-taluk stations in the Mysore State for the periods shown in the table given below. In a few cases, however, the figures for some of the years have to be rejected as unreliable. The exact years for which reliable figures are available for each taluk are given in Appendix I.

Names of stations	Number of stations	Year from which rainfall records are available in Met. Dept.	Year from which rainfall records are available in Rev. Dept.
Bangalore Observatory	1	1835	1886
Tumkur, Mysore and Shimoga ..	3	1837	Do
Kolar, Chikballapur, Bagepalli, Maddagiri, Gubbi, Pavagada, Yedatore, Heggaddevankote, T.-Narsipur, Malvalli, Mandya, Chikmagalur, Chitaldrug, Jagalur, Honnali, Nagar and Tirthahalli	17	1870	Do
Magadi, Hunsur, Nanjangud, Krishnarajpete and Hassan	5	1871	Do
Chintamani, Sidlaghatta and Seringapatam	3	1872	Do
Mulbagal, Challakere, Channagiri, Shikarpur, Sorab and Sagar ..	6	1873	Do
Goribidnur, Nagamangala, Hiriyur and Holalkere	4	1874	Do
Davangere	1	1875	Do
Kunigal	1	1876	Do
Nelamangala and Gundlupet	2	1877	Do
Chiknayakanhalli	1	1879	Do
Chamrajnagar, Tarikere and Mudgere ..	3	1880	Do
Tiptur and Koppa	2	1881	Do
Kankanhalli	1	1882	Do

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Names of stations	Number of stations	Year from which rain-fall records are available in Met. Dept.	Year from which rain-fall records are available in Rev. Dept.
Dodballapur, Turuvekere, Kadur, Hosdurga and Kumsi	5	1883	1886
Gudibanda	1	1884	Do
Anekal and Srinivaspur	2	1885	Do
Hoskote, Molakalmuru, Manjarabad, Arkalgud, Belur, Channarayapatna, Arsikere and Hole-Narsipur ..	8	1886	Do
Koratagere and Yedehalli (Narasimharajapura)	2	1889	Do
Devanhalli	1	1890	Do
Harihar	1	1892	1894
Closepet, Channapatna, Bowringpet, Malur and Sira	5	1893	1886
Sringeri	1	1897	1897
Alur	1	1896	1886

Further search in the records may bring to light figures relating to some of the stations for earlier periods.

Accuracy.

We shall now examine whether the rainfall statistics which are available are suitable and adequate for our purposes. In this connection the first thing to be considered is whether, as a rule, the statistics may be taken as reliable. We know that some persons in high positions having come across a few cases of negligence or omission on the part of observers are inclined to condemn the whole mass of rainfall statistics as far from reliable, But they seem to attach undue importance to a few isolated cases of failure. Taking all facts into consideration, we may say that the procedure under which our rainfall tables are prepared, satisfies in a reasonable measure, the conditions of accuracy. The measurement instrument is well standardized and gives no scope for large errors. The process of observation is simple in the extreme and the instructions given are clear. The annual result is arrived at on the basis of daily observations, so that error as regards a few observations does not totally vitiate the result. As long as the total quantity of water found in the receiver on any date is correctly measured and reported, a few omissions in the matter of daily report do not much affect the monthly or annual figure. The records of neighbouring stations act as a rough check on one another and would disclose gross neglect or palpable fabrication on the part of any particular observer. The process of compilation is, on the whole, carefully carried out and the periodical returns received are checked at different stages, at least partially, with the daily cards. Then, there are two independent publications one by the Revenue Department and the other by the Meteorological Department which may be checked against one another. Though there are occasional differences between the figures as published by the two departments, they agree on the whole, and this agreement is a valuable proof of the correctness of the process of compilation. Any one connected with the compilation and handling of statistics knows that they are of varying degrees of accuracy. But a careful study of the nature of our rainfall statistics leads to the conviction that except in a few instances, these may be regarded as substantially accurate and may be taken without hesitation as the basis of insurance calculations.

Discrepancy between Revenue and Meteorological Department figures.

In the previous paragraph we have referred to occasional differences between the Revenue Department and the Meteorological Department figures relating to monthly rainfall. In many cases, the comparison is exceedingly interesting, the reason for the difference being apparent and no doubt being left as to which is the correct figure. We shall give a few examples to illustrate this. When two sets of figures are quoted in these illustrations, one from the Meteorological Department records and the other from the Revenue Department records, only for particular months of a year, it is to be understood that the figures for the remaining months of the year in the two sets of figures, agree with one another.

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1886.

	April.	June	Sept.	Annual total
Meteorological Dept.	0·04	1·09	9·03 ..	22·35
Revenue do	0·40	1·90	9·30 ..	23·79

1889.

	July	Annual total
Meteorological Dept.	4·12 ..	31·12
Revenue do	3·13 ..	30·13

1890.

	Aug.	Annual total
Meteorological Dept.	2·33 ..	20·00
Revenue do	Nil ..	17·67

1891.

	June	Annual total
Meteorological Dept.	2·07	21·35
Revenue do	2·70	21·98

1896.

	May	Annual total
Meteorological Dept.	2·01	20·45
Revenue do	2·10	20·54

1902.

	Aug.	Sept.	Annual total
Meteorological Dept.	0·91	2·18	30·24
Revenue do	0·89	2·17	30·21

1903.

	Aprl.	May	June	Aug.	Dec.	Annual total
Meteorological Dept.	0·07	5·72	4·12	5·48	0·58	38·61
Revenue do	0·00	5·54	4·11	5·45	0·57	38·31

1904.

	Jan.	Mar.	May	Annual total
Meteorological Dept.	0·02	0·19	2·23	23·01
Revenue do	0·00	1·15	2·24	23·96

1905.

	Mar.	June	July	Aug.	Sept.	Annual total
Meteorological Dept.	0·03	3·70	1·69	1·59	1·34	16·27
Revenue do	0·00	3·76	1·68	1·58	1·33	16·18

1906.

	Jan.	June	July	Aug.	Sept.	Nov.	Dec.	Annual total
Meteorological Dept.	1·24	5·12	3·62	7·83	4·72	0·06	2·06	30·49
Revenue do	1·22	5·10	3·60	7·81	4·70	0·05	2·04	30·36

1907.

	May	June	July	Aug.	Oct.	Dec.	Annual total
Meteorological Dept.	0·09	2·46	3·64	2·58	0·27	0·99	22·35
Revenue do	0·03	2·43	3·63	2·55	0·26	0·79	22·01

1908.

	Feb.	April	May	July	Aug.	Sept.	Annual total
Meteorological Dept.	0·04	0·43	2·62	4·51	1·73	3·00	15·40
Revenue do	0·00	0·42	2·57	3·67	1·72	2·92	14·37

1909.

	Mar.	June	July	Oct.	Dec.	Annual total
Meteorological Dept.	0·07	1·42	2·50	2·93	0·27	25·37
Revenue do	0·06	1·32	2·48	2·86	0·32	25·22

1910.

	June	Sept.	Oct.	Annual total
Meteorological Dept.	2·49	4·01	6·92	35·17
Revenue do	2·72	3·98	6·82	35·27

1911.

	Aprl.	May	June	July	Aug.	Sept.	Annual total
Meteorological Dept.	0·53	2·79	0·96	2·37	2·17	3·13	18·87
Revenue do	0·63	2·67	0·61	2·30	2·14	3·08	18·53

1912.

	Aprl.	May	June	Annual total
Meteorological Dept.	0·45	4·07	2·54	31·00
Revenue do	0·31	4·04	2·38	30·67

1913.

	May	June	Aug.	Oct.	Annual total
Meteorological Dept.	1·41	1·57	1·24	2·75	6·17
Revenue do	1·27	1·50	1·14	2·24	15·35

1914.

	May	June	July	Aug.	Sept.	Annual total
Meteorological Dept.	2·35	0·34	4·13	3·67	2·45	17·34
Revenue do	2·27	0·33	3·94	3·59	2·41	16·94

Causes of discrepancy.

It will be seen that in all cases of difference in 1886, the mistake that is found in one of the departments is in recording say 4 cents, as ·4 instead of ·04. This is a mistake likely to be made by observers and it

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is therefore specially referred to in the memorandum of instructions given to the observers by the British Indian Meteorological Department. The following is an extract from the memorandum:—

"It should be very carefully noted that if the number of hundredths is less than ten, say, one, two, three or four, the rainfall must not be written, ·1, ·2, ·3 or ·4, but ·01, ·02, ·03 or ·04. The observer will make no mistake if he always writes two figures after the decimal point, for he will then realise the difference between ·30 and ·03, the first being thirty hundredths and the second three hundredths."

In the Mysore memorandum of instructions given to observers, the matter has not been explained so clearly and this, I think, accounts for the numerous errors of this description. There is very little doubt that in these cases, the entries which are made as ·01, ·02, etc., are correct, ·1, ·2, etc., in their places being the erroneous entries.

Another class of errors is illustrated in the entries for July 1889. The figures of the Meteorological Department and the Revenue Department are respectively, 4·12 and 3·13. Evidently in one case, there has been misposting of the figure 1 between the inch and the cent columns. A reference to the daily record, if available, may clear up, in such cases, as to which is the correct figure. A third kind of difference is illustrated in the record for August 1890. The figure in the Meteorological Department records is 2·33 and that in the Revenue Department records is *nil*. In such cases, very little doubt can exist as to which is the correct entry. They are cases of some entries being overlooked in making the monthly total.

It will be seen from the illustrations given that the cases of difference between the monthly figures of the two departments have become rather numerous since 1903, every year the figures for a number of months from three to seven out of twelve being different. In most cases, however, the difference is comparatively small and does not materially affect the annual total. It is desirable, however, that in compilations issued by the different departments of the State in respect of an important matter like this, the figures should be in absolute agreement with one another, especially when the initial observations on which they are based, are the same. The existence of an occasional difference of a small magnitude between the Revenue Department and the Meteorological Department figures does not, however, detract much from the value of the available rainfall statistics. By a careful comparison of the two sets of tables, a revised set can be prepared from which most of the mistakes will be eliminated and which may be adopted as the basis of insurance calculations.

Adequacy of available statistics for insurance purposes.

The two tests which our rainfall statistics must satisfy to make a scheme of Agricultural Insurance possible, are those of accuracy and adequacy. We have seen that, for practical purposes, the first condition may be regarded as satisfied. From what has been stated in a previous paragraph, it will also be seen that as regards the majority of taluks, the material available is also adequate. The detailed monthly rainfall

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records for years prior to 1892 appear to have been lost in the case of some stations and this is no doubt regrettable. In a case like this, the longer the period over which the available data extend, the greater will be the approach of the probable figures deduced therefrom and adopted as the basis of transactions, to the actual realities of the future. The number of years for which rainfall statistics should be available in order that rain-insurance can be ventured upon, depends upon a variety of circumstances, the chief amongst which is the range of oscillation in the figures from year to year. On the whole, we think that it may be asserted with confidence that figures for thirty years are adequate for the purpose of making a beginning. From one of the statements given above it will be seen that in the case of sixty-six of our taluk and sub-taluk stations, out of a total of seventy-seven, detailed statistics are available for thirty years or more. The statistics available are, therefore, sufficient for our purposes.

Another point in connection with rainfall may be here mentioned. Some people seem to think that in the State as a whole, the annual rainfall is becoming less and less in quantity every year and less favourably distributed as regards time, for purposes of agriculture. Apart from the school of critics who always sigh for the "good old times" and see nothing but deterioration in human institutions as well as in natural phenomena with the lapse of time, there are intelligent men and high officials who really believe that the conditions of rainfall are becoming more and more precarious every year. Even if this were so, it would not mean that rainfall statistics could not be used for insurance purposes. It would only mean that we should have to make allowance for any decided upward or downward tendency. For example, if we found that the rainfall in a particular locality is going down at a fixed rate per decennium, we shall have to apply the necessary correction to past statistics in deducing the normal to be adopted for calculations relating to future years. As far as we have been able to study the statistics, however, we find no such general tendency in the Mysore State. Charts have been carefully prepared showing the course of total annual rainfall at particular stations for periods varying from thirty to eighty years and such charts do not reveal any general dip of the lines with the progress of years. The lines oscillate upwards and downwards from year to year but the general level remains much the same.

In this chapter we have tried to shew that the mechanical appliances used in the Mysore State and in other parts of India for measuring rain are constructed and fitted up with accuracy and care; that the agency employed and the procedure adopted for observing, recording, tabulating and publishing rainfall figures, though affording room for improvement and better co-ordination, are fairly satisfactory; that the rainfall statistics though revealing occasional errors and omissions, are, on the whole, sufficiently accurate for our purposes; and that though the earlier records relating to some rain-gauge stations seem to have been lost, the material which remains extends over a period sufficient to form the basis of a system of Agricultural Insurance.

CHAPTER IV.

The Risk-fixing Dates.

Preliminary points settled.

In the three previous chapters we have discussed the most important preliminary points in connection with Agricultural Insurance. It has been shewn in the first place that Agricultural Insurance is very necessary and that it is practicable under Indian conditions in the form of rain-insurance. Secondly, we have demonstrated that, for purposes of Agricultural Insurance, it will *not* be necessary to fix rain-gauges in every field or in every village but that fairly large tracts can be dealt with on the basis of rainfall as recorded in gauges located at convenient centres and that such areas may, for convenience of working, be made to coincide with well-recognised administrative area-units. We have also found that the rainfall statistics that are available are adequate and sufficiently accurate to form the basis of a system of agricultural or rainfall insurance. Having thus cleared the ground in respect of essential preliminary conditions, we are now in a position to grapple with the problem at close quarters with a view to formulate a practical scheme complete in all respects. The first thing to be done in this connection is to settle the exact nature of the risk and this will now engage our attention.

The terms of a rain-insurance contract will be as follows, *viz.*, that if the aggregate rainfall from the

Nature of contract.

beginning of the agricultural year as measured at the rain-gauge at the taluk headquarters *up to a certain date* is less than *a certain number of inches*, then *a certain sum of money* will be paid in respect of insured fields as compensation. It will be observed that in this contract there are three important points to be settled, *viz.*, the date, degree of deficiency in rainfall and the amount of compensation. In this chapter we shall confine ourselves to the determination of the risk-fixing date or dates in the proposed system of Agricultural Insurance.

Risk-fixing dates.

The fixing of such date or dates is a task beset with considerable difficulty. We want a date in the agricultural calendar on which the insured *raiyat* can reasonably and definitely say "Up to date this year, the rainfall is so much per cent below the average; whatever the future may bring, I am sure to lose a considerable part of this year's crops. I must therefore get compensation for my insured fields." In order that such a date may be fixed with fairness both to the insurer and the insured, we must study the periods of preparing land, sowing, maturing, and harvesting in respect of *all* the important rain-fed crops of the State. For, the *raiyat* can get compensation only when, owing to deficient rainfall, he cannot get anything like a full return from his land by sowing *any suitable crop*.

Life history of important crops.

The following table gives the necessary particulars in respect of the most important dry crops cultivated in Mysore :—

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DRY CROPS.

Serial No.	Name of crop	Period of preparing land	Period of sowing	Period of maturing	Period of harvesting
1	*Early mungar crops.*—				
	Gingili, jola, green gram, black gram, groundnut, etc.	March—April	May	June—September	October
2	*Mungar crops.*—				
	Ragi, jola, groundnut, sajje, save, haraka, etc.	May—June	July	August—October	November—December
3	*Hingar crops.*—				
	Hingar jola, various grams, coriander, wheat, baragu, sanna or jowari hatti, etc.	August—September	October	November—February	February—March
4	*Early cotton.*—				
	Dodda hatti	June—July	August	September—February	March

Mungar and *hingar* crops.

It will be seen that with regard to the early *mungar* and *mungar* crops and local cotton, the sowing period extends from May to August. These groups include the most important dry crops of the State, *viz.*, ragi, jola, green and black gram, gingili, groundnut, castor, etc. In respect of these crops it may be said that the process of preparing lands and of sowing would materially suffer if there is not sufficient rain up to the 31st of July. As regards the *hingar* crops like *hingar* jola, various grams, coriander, wheat, baragu, etc., however, land may be prepared in August and September and they may be sown in October. These crops are harvested in

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February and March. If the rainfall is inadequate up to the end of July, but is satisfactory from August onwards, the *hingar* crops will not be materially affected. They are, however, not so important as the *mungar* crops which supply the main foodgrains of the people.

Paddy.

In this connection the case of paddy also may be considered. It is in most places a wet crop which requires irrigation. But as many of our tanks are merely balancing basins which catch the rainfall for the year and distribute it according to requirements, a considerable part of our paddy crop may also be regarded as directly depending on the rainfall of a particular year. The *hain* crop is the most important paddy grown in the State and it is sown in the month of June and July and transplanted during August. The time of raising the *kar* crop which is of minor importance can, to a great extent, be made to suit the seasonal conditions. At the earliest, it may be raised as *Tula kar* which can be sown in October and transplanted in November, and at the latest, as *Mesha kar* which is sown in May and transplanted in June. The normal *kar* crop is however the *Kumbha kar* which is sown in December and transplanted about the end of January. The *hain* crop is harvested in November and December and the *kar* crop from February onwards. It will be seen from this programme that if the rainfall is inadequate up to the end of July, the sowing of *hain* paddy and in some cases of the *kar* paddy also is bound to be considerably affected.

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The 31st of July may therefore be taken as a risk-fixing date for purposes of Agricultural Insurance in Mysore. Meteorologically it represents the mid-point of the south-west monsoon which may be said to extend from June to September. Inadequacy of rain up to 31st of July will mean that the first half on the south-west monsoon has been a failure, and all the agricultural processes which depend on this monsoon have suffered materially.

31st of July the first risk-fixing date.

At the same time it cannot be said that if the rains hold off up to the end of July, the agricultural situation for the year becomes irretrievable. If the rainfall thereafter is satisfactory, and if by the end of October there is sufficient rain, the *hingar* crops such as, *hingar* jola, various grams, coriander, wheat, etc., will do well. Ragi and *hain* rice will succeed, at least partially, with hard work and *kar* rice crop will be unaffected. On wet and garden lands, potatoes, cambodia cotton and various garden crops can be sown in September and October. The 31st October has therefore to be recognised as an important date in the agricultural calendar. Meteorologically it represents the mid-point of the north-east monsoon which may be said to cover the months of October and November. The months of August, September and October represent the period when the chief *mungar* crops mature and rainfall during this period is therefore to be regarded as very important. Even if there be good rain from January to July, but if

31st of October the second risk-fixing date.

the rainfall be unsatisfactory from August to October, most of the dry crops as also wet crops depending on one-season reservoirs will suffer and compensation will be due in respect of insured fields.

Two risk-fixing dates.

The conclusion is therefore this. It is not possible in the circumstances of agriculture in Mysore to find *one* single date in the agricultural calendar, rainfall up to which date may be regarded as deciding the character of the agricultural season for insurance purposes. A study of the periods of growth of the several crops shews that rainfall during two periods is of great importance. These are (1) April to July, and (2) August to October. As January to March is practically rainless in Mysore, we may, for convenience, say that the rainfall from 1st January to 31st July is the first determining factor of Mysore agriculture and that again rainfall from 1st January to 31st October is the second determining factor.

Two instalments of compensation independent of one another.

In our scheme of Agricultural Insurance, the compensation will therefore have to be divided into two instalments. For convenience in working, these instalments may be equal. If the rainfall as measured in the rain-gauge at the taluk head-quarters from 1st January to 31st July is below the prescribed minimum, then the first instalment of compensation will be paid. If again, the rainfall from 1st January to the end of October is below the prescribed minimum for that period, then the second instalment will also be paid. The two payments should be entirely independent of each other and will depend solely on the aggregate rainfall for the two periods. In some years, the first instalment may be payable but not the second. These will be years in which the preparation of land and sowing have been hampered for want of rain but copious showers subsequently make up for the defect to some extent. In other years again, the second instalment may be payable but not the first. These will be years in which the preparation of land and sowing have been carried out under favourable rainfall conditions but the crops suffer for want of rain during the period of maturity. There will also be years in which both the instalments will be payable—years of unfavourable agricultural conditions from beginning to end. Of course, there will be years in which the rainfall will be favourable in both the periods and no compensation will be payable.

In this chapter, as in the previous ones, we have taken the conditions prevailing in the Mysore State for illustration and definiteness. The same methods of investigation and processes of reasoning may be applied to any other area with similar or different agricultural conditions.

CHAPTER V.

The Minimum Limit of Deficiency in Rainfall Requiring Insurance Compensation.

Gradual development of the subject.

In the first chapter of this work, the necessity and possibility of rain-insurance was established. In the second chapter we dealt with the question of local basis and proved that rainfall insurance would be possible in most parts of the Mysore state on the basis of taluks taken as area-units. The adequacy and reliability of the existing rainfall statistics were demonstrated in the third chapter. The important preliminary points having been considered in the first three chapters, the essential elements of an Agricultural Insurance contract were taken up for detailed consideration in the fourth chapter. Such a contract would be to the following effect, *viz.*, if the rainfall *by a certain date* in the agricultural year is less than *a certain amount*, then *a certain sum of money* would have to be paid by the insurer in respect of the insured fields by way of compensation provided, of course, the premia of insurance have been regularly paid to the insurer. The first undetermined element in the contract, *viz.*, the question of the risk-fixing date was considered in the fourth chapter. It is now proposed to discuss the next important element, *viz.*, for what degree of deficiency in rainfall compensation should be payable.

Compensation according to actual deficiency in out-turn of crops is impracticable.

In a system of rainfall insurance, it is not practicable to give compensation for all possible degrees of deficiency in rainfall. Compensation must be limited to cases in which the deficiency is considerable and such as to materially affect the result of agricultural operations. It would create endless confusion and disputes if things were left to be determined by the amount of actual deficiency in the out-turn of crops. A painstaking and industrious cultivator may raise a fairly good crop with a deficiency of as much as 35 per cent in rainfall; while a lazy and indolent man may not be able to get anything even with a deficiency of only 25 per cent. Apart from the personal factor, there may be natural circumstances which will affect the relation of the percentage of deficiency in rainfall to the actual agricultural out-turn. The distribution of rainfall is a very important factor. A deficiency at the critical periods in the life of crops is much more important than a deficiency at other periods. The total quantity of rainfall is also important. A deficiency of 35 per cent may be fatal in places where the annual total rainfall is from 15 to 20 inches, but it may not be a very serious thing in many places where the rainfall is over 50 inches.

Compensation for deficiency in rain will practically serve the purpose.

The facts stated in the preceding paragraph show that a rain-insurance policy to the effect that if the rainfall by a certain date in the agricultural calendar does not reach a certain amount, a certain sum of money will be payable as compensation, is not a perfect protection against all kinds of agricultural vicissitudes. But it has never been claimed that rain-insurance would be such a protection under all conditions and in all circumstances. The question is whether the total rainfall from the beginning of the year up to 31st July and that from the beginning of the year up to 31st October do not materially affect agricultural conditions. Assuming, for the sake of definiteness, that 35 per cent is the minimum limit of deficiency requiring insurance compensation, which we may arrive at after full consideration later on, the question is whether or not relief will be afforded in a large majority of cases in which it is actually needed if there is the guarantee that compensation will be paid if the rainfall up to the date specified above is in defect of the normal by more than 35 per cent. The relation of rain precipitation to agriculture may vary under different circumstances. But there will be few who will doubt that a guarantee like this will afford a real and much needed relief in the great majority of cases. Of course, there will be a few instances in which, owing to favourable conditions, there may be fair crops in spite of a defect of 35 per cent. There may be a few other cases in which, owing to peculiarly adverse or unfortunate circumstances, crops may fail with a deficiency of less than 35 per cent. But if the percentage is carefully fixed on the basis of experience as regards rainfall and agricultural conditions of the taluk for a considerable number of years as indicated by carefully corrected statistics, then such cases will be exceptional. Cases in which an insured field gets compensation when there is a good crop or those in which compensation is not payable under an insurance contract in spite of a decided failure of crops will be rare. As a general rule, compensation will be obtained in cases in which there is a failure of crops in spite of the best endeavours on the part of the cultivator to make the most of his land. The object in view will thus be gained.

Limit of deficiency requiring compensation may vary.

It is not intended by what has been stated above that the percentage should be fixed at 35 or that it should *necessarily* be the same in the case of all taluks. The figure has been taken only for the purpose of discussing the general principles involved. The rainfall and agricultural statistics of every taluk should be studied carefully with the view of ascertaining what percentage of defect below the normal rainfall results in a material failure of crops. Of course, there are degrees of failure and the percentage may be fixed at a high or at a low figure. If the percentage of defect is fixed at a low figure, the required degree of defect will occur frequently. For example, if we say that compensation will be payable in a certain taluk if the defect in rainfall is in excess of 20 per cent of the normal, such cases may occur, on an average, once in three or four years. On the other hand, if we say that the compensation will not be payable unless the defect exceeds 50 per cent of the normal, then such cases will probably arise only once in ten years.

Effects of fixing high and low limits.

A scheme of rainfall insurance for the state should not be worked for the sake of any direct pecuniary gain to Government. On the other hand, it will not be possible to work a

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scheme if it works at a loss and involves a considerable and perpetual drain on the resources of the state. In the long run, what will be taken as premium in the favourable years from the insured, should be given back to them in years of distress as compensation. It is therefore evident that if we fix a low percentage of defect in rainfall as the limit at which compensation will become payable, it will be a case of paying comparatively small compensations at frequent intervals. On the other hand, if the limit is fixed high, compensation will be payable only at long intervals when the failure of crops and the resulting distress are severe but the compensation will be a very substantial sum.

Compensation should be substantial and not very rare.

Our object should be to fix the limit of insurable rainfall defect in every taluk so that we may avoid either extreme. A compensation if it is an insignificant amount, as it must be if it has to be repeated at frequent intervals will hardly serve any useful purpose. On the other hand, if the occasions when the insured get any relief are very few and far between, as must be the case if the compensation amount is to be very large, the scheme will hardly appeal to our agriculturists. The percentage should be so fixed as to make the amount of compensation substantial; at the same time, the occasions for the grant of compensation should come sufficiently frequently to make the scheme attractive to those for whose benefit it is intended.

The investigation on this point depends on a close and careful study of the percentages of excess or defect in rainfall at all taluk headquarters for a long series of

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Importance of correct rainfall normals.

years (*vide* the last paragraph of this chapter). This excess or defect is calculated with reference to the normal. A small error in the normal will therefore vitiate all the percentage figures and make the result incorrect. A considerable error in the normal will render all the figures relating to the taluk absolutely wrong and make the result positively misleading. It is therefore very necessary that the normal rainfall figures adopted for our calculations should be as accurate as possible.

Principles of revising normals.

The principles adopted by me in slightly revising in a few cases the rainfall averages as given in the Meteorological Department annual reports are these :—

(*a*) In cases in which full details for the entire period for which the average is calculated are available and the average actually worked out differs from the Meteorological Department average, I have adopted the actual average as per calculation. This is, of course, subject to the conditions, *viz.*, *first* that the detailed statistics for the whole period after close and careful scrutiny shew no signs of being incorrect or unreliable, and, *secondly*, that it cannot be ascertained from the records of the Meteorological Department how the average published in its report has been arrived at.

(*b*) In cases in which actual details for the full period covered by the Meteorological Department averages are not available but there are *considerable* variations between the Meteorological Department averages and the averages for 10, 20 or 30 years based on available statistics, I have made fresh calculations on the basis of actuals for the longest period for which figures are available and taken the figures thus arrived at, instead of accepting the Meteorological Department averages. Here also the revision is made only in cases where the detailed statistics are *prima facie* accurate.

It must, however, be clearly stated that in the large majority of cases the Meteorological Department averages are correct and require no revision at all. In the few cases in which any revision has been made, the object has been to secure absolute agreement between detailed annual figures and the averages based on them. Even if the Meteorological Department averages were accepted in all cases, the results would not have been materially different. But as in working out the results of our scheme, we have in some cases to use both the annual figures and the averages, mathematical consistency is necessary for our purposes between the detailed annual figures and the averages taken as the basis of calculation.

Examining years of deficient rainfall for insurance purposes.

As has been explained above, the determination of the correct average rainfall at a taluk headquarters station is the first step towards settling the question of the minimum limit of rainfall deficiency requiring compensation in that taluk.

The procedure that will be adopted in determining the limit is indicated below :—

The total rainfall from 1st January to 31st July every year at the headquarters of the taluk concerned will be tabulated. The years in which the rainfall is less than 75 per cent of the normal, *i.e.*, in which the percentage of deficiency is in excess of 25, will then be noted. It will be examined whether all these years were really years of agricultural distress. If it is found that all these years were *not* years of distress in which compensation was necessary, a higher percentage, *e.g.*, 35, will be taken and the years in which the rainfall was deficient by more than 35 per cent will be similarly scrutinized. In this way a percentage of deficiency in rainfall will be arrived at for the taluk which may be taken as the limit beyond which relief is needed. A similar investigation will have to be undertaken in respect of the rainfall total from 1st January to 31st October.

In the next chapter we shall deal with all the taluks of the Chitaldrug district by way of illustration. This district is selected as it is the driest in the whole state where rain-insurance is most urgently needed. At a later stage of our investigation when the financial results of a complete system of rain-insurance for the whole state will be worked out, similar calculations will be undertaken in respect of all the districts.

CHAPTER VI.

The Frequency of Deficiency Years.

The chain of arguments.

In the first three chapters we proved that Agricultural Insurance in the form of rain-insurance was desirable, that a suitable local basis could be found for working such an insurance scheme and that the available rainfall statistics were sufficient. In the fourth chapter it was shewn that the last days of July and October were appropriate dates the aggregate rainfall up to which from the beginning of the year could be taken as the basis of rain-insurance contracts in the Mysore State. In the fifth chapter we took up the question of determining the degree of rainfall defect, for deficiencies beyond which compensation should be payable. As this deficiency was to be determined as a percentage of the aggregate normal rainfall, we saw that it was necessary to arrive at correct rainfall normals for all the taluk headquarters stations. In this chapter it is proposed to complete the investigation regarding the degree of shortage in rainfall for deficiency beyond which compensation should be payable and to examine the frequency with which years of such deficiency in rainfall are likely to occur.

It must be distinctly understood that our scheme is not one of graduated compensation in which an attempt is made to estimate the actual loss to the agriculturist in each case and to regulate the compensation amount according to the money value of such loss. Such a scheme would be theoretically perfect, but in the circumstances of India, and in fact, in those of any other country, would be practically unworkable. The scheme which we contemplate is a very simple one from which personal factors or factors under human control have been eliminated as far as possible. Under our simplified scheme, if the rainfall from 1st January to 31st July as measured at the taluk headquarters is in defect beyond a certain percentage of the normal, the first instalment of compensation will be paid; if again the rainfall from 1st January to the 31st of October is in defect beyond the fixed percentage a second instalment of compensation will become payable.

Accurate graduation of compensation not attempted.

Boundary of insurable deficiency.

The point which we have now to proceed to investigate is where to draw the line between an immaterial degree of shortage in rainfall and a material degree of deficiency for which compensation is necessary. Of course, in the actual realm of facts there is no sharp demarcation. From a trifling deficiency of one or two per cent to a severe drought involving a deficiency of over 50 per cent of the normal, there are all degrees of deficiency and it is not possible to say that no loss results up to a certain limit of deficiency but that beyond that limit considerable loss arises and the payment of substantial compensation becomes necessary.

For purposes of working out an insurance scheme of this kind, however, we must draw the line somewhere. In cases where the deficiency is just a trifle less than the percentage we fix, there will be some loss for which no compensation will be paid. In cases where the deficiency falls just on the other side of the line, the amount of compensation given may be somewhat in excess of what the actual loss may justify. But there can be no doubt that if we fix the percentage carefully and after detailed study, it will work fairly and justly, on the whole, both to the insurer and the insured. In the preceding chapter we have discussed the subject generally. We shall now proceed to show in detail how this percentage should be fixed, illustrating the process by taking facts relating to the taluks of the Chitaldrug district.

Frequency of deficiency years on 75 per cent basis.

In the first place let us determine how frequently, on an average, degrees of deficiency requiring compensation would occur if compensation were to be paid whenever the shortage in rainfall was more than 25 per cent of the normal. Take the case of the Chitaldrug taluk. The correct rainfall normal in this taluk for the period from 1st January to 31st July is 10·69 inches. Seventy-five per cent of this is 8·02 inches. Now if we prepare a table shewing the actual aggregate rainfall at Chitaldrug from 1st January to 31st July for all the years from 1870 to 1914 we shall find that in 8 of these years the rainfall is below 8·02 inches, *i.e.*, in defect by more than 25 per cent. Similarly, the correct average for the

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aggregate rainfall from 1st January to 31st October is 22·51 inches and 75 per cent of this is 16·88 inches. If we prepare a table shewing the rainfall at Chitaldrug from 1st January to 31st October in all years from 1870 to 1914, we find that in 11 of these years the actual rainfall is less than 16·88 inches, *i.e.*, in defect by more than 25 per cent. In a period of 45 years therefore, there are altogether 19 periods in the Chitaldrug taluk in which compensation would be required. This result we tabulate as follows:—

Name of taluk	Failures in the first and second periods	Total number of failures	Period	Proportionate number in 40 years
Chitaldrug ..	8F1+11F2	19	45	$\frac{19\times40}{45}=17$

As statistics are not available in the case of all the taluks for 45 years as in the case of Chitaldrug, the number of deficiency periods, *viz.*, 19 is reduced to the proportionate number for 40 years by multiplication by the factor $\frac{40}{45}$.

Similar calculations with reference to all the taluks of the Chitaldrug district lead to the following result:—

Name of taluk	Failures in the first and second periods.	Total number of failures	Period	Proportionate number in 40 years
Chitaldrug ..	8F1+11F2	19	45	17
Holalkere ..	11F1+ 5F2	16	41	16
Challakere ..	12F1+ 8F2	20	42	19
Harihar	6F1+ 6F2	12	23	21
Hiriyur	12F1+11F2	23	41	22
Hosdurga.. ..	9F1+ 5F2	14	32	18

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Name of taluk	Failures in the first and second periods	Total number of failures	Period	Proportionate number in 40 years
Jagalur	12F1+ 6F2	18	43	17
Molakalmuru ..	7F1+ 6F2	13	29	18
Davangere ..	15F1+ 8F2	23	38	24

It will be seen from the foregoing table that the number of deficiency periods requiring compensation in 40 years varies from 16 to 24. This may be represented by 20 ± 4. The variation of 4 on either side is small and such as may be reasonably expected in the process of reducing any natural phenomena to formula. The conclusion arrived at is this, *viz.*, that in the Chitaldrug district out of 80 periods in 40 years, 20 periods on an average would require compensation on the 25 per cent deficiency basis.

65 per cent basis or 35 per cent deficiency basis.

A table constructed on similar principles but on the 35 per cent deficiency basis is given below:—

Name of taluk	Failures in the first and second periods	Total number of failures	Period	Proportionate number in 40 years
Chitaldrug ..	6F1+5F2	11	45	10
Holalkere ..	6F1+4F2	10	41	10
Challakere .	8F1+6F2	14	42	13
Harihar	4F1+1F2	5	23	9
Hiriyur	7F1+6F2	13	41	13

Name of taluk	Failures in the first and second periods	Total number of failures	Period	Proportionate number in 40 years
Hosdurga	5F1+2F2	7	32	9
Jagalur	7F1+4F2	11	43	10
Molakalmuru	4F1+4F2	8	29	11
Davangere	6F1+5F2	11	38	12

The number of deficiency periods in 40 years on the 35 per cent deficiency basis ranges from 9 to 13 which may be represented by 11 ± 2. This means that compensation will be payable on an average 11 times in 80 periods or once in 7 to 8 periods, *i.e.*, about once in 4 years.

50 per cent basis or 50 per cent deficiency basis.

A table calculated on similar lines on the 50 per cent basis is given below:—

Name of taluk	Failures in the first and second periods	Total number of failures	Period	Proportionate number in 40 years
Chitaldrug	2F1+1F2	3	45	3
Holalkere	1F1+3F2	4	41	4
Challakere	4F1+2F2	6	42	6
Harihar	2F1+0F2	2	23	4
Hiriyur	2F1+3F2	5	41	5
Hosdurga	3F1+0F2	3	32	4
Jagalur	6F1+1F2	7	43	6
Molakalmuru	2F1+2F2	4	29	5
Davangere	2F1+1F2	3	38	3

It will be seen that the number of periods requiring compensation on the 50 per cent deficiency basis varies from 3 to 6. This may be taken as represented by 4½ ± 1½. The interpretation is that out of 80 periods in 40 years in the Chitaldrug district, compensation will be payable in 4½ periods if we adopt the 50 per cent basis. This works out to once in 18 periods or about 9 years.

Striking uniformity of results.

The narrow range within which the number of periods requiring compensation varies from taluk to taluk on each basis of calculation is remarkable. It enables us to say that though the deficiency years and the intervals between years of deficiency are different in different taluks, the average number of seasons of deficient rainfall is approximately the same in all taluks if we take into account a considerable number of years. This makes it possible to fix the limit of deficiency beyond which compensation is payable on a uniform basis in respect of the whole district. In fact, the calculations given in Appendix II and Chapter X will shew that except for two small well-defined belts in the *malnad* and *semi-malnad* zones, *i.e.*, the hilly parts of the state on the west, the adoption of the 65 per cent basis gives the same frequency of deficiency seasons for the whole state, *viz.*, 11 ± 2 in 40 years or 80 seasons—a result which can really be described as remarkable on account of the uniformity it indicates.

65 per cent the best basis.

Considering the results of calculation on the 25, 35, and 50 per cent deficiency basis respectively, we have very little difficulty in perceiving that the 35 per cent deficiency basis

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is the one which should be adopted in actual practice. If we adopt such a low basis of deficiency as 25 per cent, compensation will have to be paid in one season out of 4, *i.e.*, once in 2 years. The amount of compensation that can be paid under such circumstances will be insignificant and will not afford any substantial relief. On the other hand, if we adopt such a high deficiency basis as 50 per cent, then compensation will be payable once in 18 seasons, *i.e.*, once in 9 years. The amount of compensation when it is paid under such circumstances will be substantial. But it is doubtful whether a scheme under which compensation will be paid once in 9 years will be sufficiently attractive to our agricultural population. On the 35 per cent basis we find that compensation will be payable in eleven seasons out of 80, *i.e.*, approximately once in 7 or 8 seasons. This gives a partial compensation once in 4 years or a full compensation once in 8 years. This seems to be a desirable and proper interval both from the point of view of frequency and the amount of compensation that can be paid.

There are several methods by which we can find out whether any particular year in the past was a year of agricultural failure or distress in any taluk. First, there is the direct information, *viz.*, the reported out-turn of the several crops in the area, which is generally expressed as so many *annas* in the rupee, 16 annas representing a normal crop. If the out-turn of the important crops in a taluk is very low, the year must be regarded as one of agricultural failure. Unfortunately, the estimate of the yield of any crop is arrived at only on rough observation and there is always a personal equation in estimates so made. To check the conclusion arrived at on the basis of out-turn reports, there are several criteria. The first of these is the percentage of land revenue collections to the total demand. In years of distress this percentage is low. Another criterion is the reported market prices of the principal grains grown in the area. In years of failure of crops or agricultural distress, the prices are generally high. But the opening up of communications and the development of trade have made prices to a great extent independent of purely local agricultural conditions. Prices may, sometimes, rule high in a year of good crops if there is great demand for grain in other parts, and may be moderate in bad years if trade demands are not brisk. In fact, whether any particular year was one of agricultural failure can be decided only after carefully considering these factors and other circumstances. A study of the conditions for a series of years in respect of a number of taluks on these lines indicates that the 35 per cent deficiency basis gives, with a fair degree of correctness, the years of agricultural depression or failure in which the payment of compensation to agriculturists might be considered economically necessary.

Result.

We have now determined two out of the three essential points in the rain-insurance contract. The contract will be as follows :—

If the rainfall as measured by the rain-gauge at the taluk headquarters from 1st January to 31st July in any year be in defect by more than 35 per cent of the

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normal as specified, a compensation of four times the annual premium will be paid in respect of every insured field. Also, if the rainfall from 1st January to 31st October in any year is in defect of the normal by more than 35 per cent, a compensation of four times the annual premium will be similarly paid.

In the next chapter we shall try to ascertain what this annual premium should be in respect of each acre of land so that the absolute amount of compensation money can be determined.

CHAPTER VII.

The Amount of Compensation.

General principles.

IN trying to determine the absolute amount of compensation that would be appropriate in respect of various classes of land insured under the proposed scheme, we may, in the first place, consider the general principles that should guide us in the matter. The material points that arise in this connection are discussed in the following paragraphs.

Net income should be secured by insurance.

The most important factors that we have to consider in connection with the income of an agriculturist are the value of the gross produce of his land and his net income. The latter is got by subtracting from the former all expenses of cultivation. Now it is a well-known fact that, in the case of a great majority of our agriculturists, the net income is very near the absolute minimum that is necessary for living. There is not much margin left in the net income for saving or for luxuries. In any scheme of Agricultural Insurance which is to effectively remove acute hardship in years of distress, the amount of compensation must therefore be fixed at such a figure as will bring the agriculturist's net receipts to the level of his net income in ordinary years.

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No fractional insurance.

In our scheme of Agricultural Insurance, compensation is given on the occurrence of a contingency over which the agriculturist has no control whatever. The compensation is given irrespective of what little he may be able to grow on his fields in years of drought. There is no fear that the grant of compensation under these conditions will take away the incentive to work or promote idleness. Moreover, the agriculturist or any one else cannot know whether compensation would become payable in any year until the agricultural season is well advanced. In these circumstances, there is no necessity for applying the principle of fractional or partial insurance in our scheme. On the other hand, as the net income of the agriculturist represents only the means of bare subsistence, the object of the insurance should be to make up the full net income of the agriculturist.

Even in bad years the *raiyat* may get one-third of his normal income.

At the same time, we must remember that even in the worst agricultural season, the agriculturist need not be wholly idle. From what has been stated in the fourth chapter, it would be clear that even in the most unfavourable years, the agriculturist can do something and get some income either from his lands by sowing inferior crops or by other means. It may be assumed for our purposes that the *raiyat*, even in the most unfavourable circumstances as regards rain-fall, can get one-third of his normal net income if he is sufficiently active and industrious.

The amount of compensation should therefore be

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fixed at two-thirds of his net income. An amount equal to one-third of the net income may be given on the failure of rains during the first period, *viz.*, from 1st January to 31st July and another equal amount, *viz.*, one-third of net income on the failure of rain in the second period, *viz.*, from 1st January to 31st October. It may be said that in this scheme of compensation the *raiyat* is not reimbursed in respect of the cost of cultivation, part of which he would have incurred and lost in unfavourable years. This objection has no doubt some force. But in a year of serious deficiency in rainfall, a considerable part of the expenses of cultivation may be avoided. Moreover, expenditure on such items as manure, if they are not useful in one season, will remain as an asset and become useful, at least partly, in another season. It is only some small items like the cost of seed and the wear and tear of the plough, etc., that are absolutely lost in cases of failure of crops.

Compensation should be two-thirds of net income.

On the basis of the principles discussed in the foregoing paragraphs let us consider the case of a cultivator with 8 acres of average *ragi* land and find out what the amount of compensation should be in his case. The cost of cultivation per acre of such land may be taken as follows :—

Estimate of net income.

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	Rs.
Assessment	1
Manure	8
Fresh earth	3
Ploughing, harvesting and threshing ..	10
Other tillage charges	1
Total ..	23

The gross out-turn per acre of such land may be taken as 400 seers of corn and two cart loads of straw. The value of this may be taken as follows :—

	Rs.
Corn at 15 seers per rupee	26
Straw at Rs. 4 per cart load	8
Total ..	34

The net income of a man who can cultivate 8 acres of *ragi* land will therefore be 8 × (34—23) = 88. Taking a family as consisting of four souls, this agrees fairly well with the general estimate of income per head of population which is generally taken at Rs. 30 per annum for the entire population incuding all classes.

Premium works out to be approximately equal to assessment.

According to the principles which we have enunciated, the compensation which is to be given to this cultivator in a year of total failure will be two-thirds of 88, *i.e.*, Rs. 58. The assessment which he pays on his 8 acres of land has been taken at Rs. 8. The proper amount of compensation therefore works out to be between 7 and 8 times the assessment. We have seen in the previous chapter that on the basis of allowing compensation for a deficiency of over 35 per cent in rainfall, the ratio of annual premium to the amount of compensation in a year of total failure in areas like the Chitaldrug district will also be nearly 1 to 8. It is thus seen that if the annual premium is fixed at the assessment figure, the compensation in a year of drought will be just what it should be to make up the net income of the agriculturist.

An important coincidence.

The coincidence brought out in the preceding paragraph is of very great importance in connection with the proposed insurance scheme. It makes the scheme very simple and easily intelligible to the *raiyat.* A proposition that if the *raiyat* pays an insurance premium equal to his assessment, he will receive a compensation of 8 times the amount in a year of drought beyond the specified degree will be easily understood by him.

Automatic adjustment of compensation by making premium equal to assessment.

Although the actual calculation in the preceding paragraphs has been made with reference to a particular class of land, *viz.*, high class dry land, the result which is arrived at may be applied to all the other kinds of land as well. For poor dry lands, the assessment is less than Re. 1 per acre. The premium in these cases will therefore be less but the compensation also will be proportionately less. As the net income from poorer lands is less, this will not operate as a hardship. In the case of richer lands on which the assessment is more than Re. 1 per acre, the premium will be higher and the compensation payable will also be proportionately greater. In this way the amount of compensation payable will adjust itself properly to the requirements of each case by the expedient of making the annual premium equal to the annual assessment.

Approximate agreement between loss and compensation sufficient.

After all, it is the ratio of the annual premium to the amount of compensation which is material from the financial point of view. This ratio is determined on the basis of rainfall statistics and is absolutely independent of the average value of the outturn on particular kinds of land. The fixing of the amount of compensation so that it may approximately bring up the net income from the insured fields to the normal level is necessary not for the *financial* soundness of the scheme but for securing the *economic* ideal that the scheme should be one of real insurance and removed as far as possible from gambling. A little difference between the amount of compensation and the loss of income in respect of the insured lands will not affect the financial aspect of the scheme in any way ; the economic utility of the scheme also will not be materially affected by a moderate degree of divergence.

Essential points in an insurance contract.

We are now able to state in full detail the essential points of a contract of Agricultural Insurance as contemplated in our scheme. The contract will be to the following effect :—

If a *raiyat* insures his fields for any year by paying a premium equal to the land revenue assessment on such fields and if the rainfall at the headquarters of the taluk in which the insured fields are situated, from 1st January to 31st July in that year is in defect of the normal as specified in the contract by more than 35 per cent, compensation equal to four times the annual premium will be paid in respect of the insured fields. A similar compensation of 4 times the annual premium will also be paid if the rainfall from the 1st January to 31st of October is in defect of the normal as laid down for that period by more than 35 per cent.

The condition, *viz.*, that the compensation for a seasonal failure will be four times the annual premium would apply only to areas like the Chitaldrug district in which the number of failures in 40 years or 80 periods is, as we have seen in Chapter VI, 11 ± 2. We shall see later on that the greater part of the Mysore state, *viz.*, the whole of the *maidan* part, falls under this class. It will also be seen that there are two other clearly defined belts in the *malnad* and *semi-malnad* parts of the Mysore state in which the number of failures in 80 periods is 7 ± 2 and 3 ± 1 respectively. In the former case there will be one failure period in every twelve periods or every six years and the amount of compensation for failure of rain during one period will be 6 times the annual premium. If the rains in both the January-July and January-October periods fail, the compensation will be 6 times the annual premium for each period or 12 times the annual premium for the double failure of the year. Similarly, in the case of the latter class of areas, the compensation for a failure of rain during one period will be 13 times the annual

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premium and that for a year in which the rainfall is deficient during both periods. 26 times the annual premium.

The rates and prices assumed in an earlier part of this chapter for arriving at the cost of cultivation per acre and the value of the gross out-turn have materially changed since that portion was written. But the figures have not been revised, *first* because, the present excessively high level of prices is quite abnormal, and *secondly* because, a rise in both the cost of cultivation and the price of the gross produce may have left the net income of the cultivator nearly where it was.

CHAPTER VIII.

The Period of Contract.

In this chapter we propose to discuss the period for which Agricultural Insurance contracts should be entered into.

It is clear that insurance contracts contemplated under the scheme put forward in this work are essentially annual contracts. If the insured pays his premium for the year before the due date, the insurer will take a definite risk for the year. As long as the rainfall tables which form the basis of calculations remain the same, the risk for insurance purposes is exactly the same in one year as in any other and therefore the premium must be the same every year. It would therefore seem, at first sight, that the rate of annual premium must be the same whether the proposer wants to enter into a contract of rain-insurance for one year, for five years or for ten years.

Essentially an annual contract.

It is, however, very desirable that some means should be devised for encouraging long-term contracts if it can be done without sacrificing any element of soundness. A perpetual contract or a contract for a very long term is indeed not desirable either from the point of view

Long-term contracts desirable.

of the insurer or of the insured. The rainfall average of any particular station, as adopted for purposes of insurance, is not an absolutely fixed quantity, holding good for all time. In the course of a long series of years the characteristics of rainfall in a particular tract may vary and the rates may have to be re-adjusted with reference to such variations. At the same time it is very desirable that instead of annual contracts there should be quinquennial or decennial contracts, as far as possible. The stray contract for one year will not do much good nor fulfil in any great measure the healthy moral and economic objects of insurance. If the year turns out to be an unfavourable one, the insured will gain and will regard the result as a piece of good luck. If, on the other hand, the year is favourable, he will regard his money gone for nothing and will smart under a sense of loss. We have seen that in the case of the Chitaldrug district and on the 35 per cent deficiency basis, a partial failure of rain will take place once in four years on an average. If then the contract is for 5 to 10 years, it is likely that within the period the insured will get one or two instalments of relief. There will be less of the element of luck in such contracts. On the other hand, there will be a genuine spirit of security over a fairly long period which it is the object of all healthy insurance contracts to induce; and the insured will, in addition to the feeling of security, actually get back in many cases nearly the whole amount of premium paid by him.

It is therefore proposed that if the annual premium in a particular case amounts to one rupee, the

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Sliding scale of premia.

aggregate premium payable on a five years' contract should be Rs. 4-4-0 instead of Rs. 5-0-0. This will mean a rebate of 15 per cent in the aggregate premium. This sum of Rs. 4-4-0 should be payable as follows :—

Rupee	1	..	..	1st year
Annas	13	..	..	2nd year
Annas	13	..	..	3rd year
Annas	13	..	..	4th year
Annas	13	..	..	5th year

It will be seen that this arrangement is convenient from all points of view. If the policy-holder discontinues his premium after the first year, he would have paid the full premium on the annual contract basis. But he will have some incentive to continue his premium for the second and subsequent years because the premium in those years is lower. If he stops in an intermediate year, he will lose the benefit of continuity and if he wants to insure again, he will have to take out a fresh policy and pay the higher premium for the first year.

Similarly, for a contract of ten years, the aggregate premium payable may be fixed at Rs. 7-6-0 instead of Rs. 10. This means a rebate of about 26 per cent. The premium may be payable as shewn below :—

Rupee	1	for 1st year
Annas	13	a year from the 2nd to the 5th year
Annas	10	a year from the 6th to the 10th year

It will be seen that, for those who understand the benefits of insurance and avail themselves of the security afforded by it, these terms will be a strong incentive to go in for a ten years' contract in as much as premium for the last five years of the contract will be only a little more than half the ordinary rate. The average annual premium in a five years' contract will be about 14 annas and that in a ten years' contract about 12 annas, the premium in a single year's contract being taken as one rupee.

Can this concession be shewn to long-term policy-holders out of interest accumulations?

It may be asked that, as by calculations in the fifth and sixth chapters the annual rate of premium is the rate arrived at on the basis of no profits being reserved for the insurer, how insurance can be effected on rates lower by about 15 and 26 per cent in the case of five and ten years, contracts without sacrificing the financial soundness of the scheme. This is a very pertinent question and must be carefully considered. At the first sight it may seem that the difference might be met from the interest of accumulated funds. Life insurance offices, for example, have large balances in hand and they derive a considerable amount as interest by the investment of these balances. It may be thought that the premia received in the case of rain-insurance will not in most cases be used up immediately and the interest on the balances in hand, which has not been taken into account in fixing the rate of compensation, may be more than sufficient to cover the small concession that is proposed to be given to long-term policy-holders. But there is an essential difference between the case of life insurance and that of rain-insurance. A life insurance office must always have accumulated funds to cover the excess of the present

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value of its liabilities over the present value of all prospective premium receipts. In the case of rain-insurance, the premium for each year covers the risk for that year and there is no growing liability against which there must be accumulated funds. For example, a life insurance office must always have a certain number of nearly mature policies in respect of which only a small amount remains to be received as future premium but a large amount has certainly to be paid in the near future. Unless there are accumulated funds, such liabilities cannot be met. No such considerations can apply to the case of rain-insurance. Suppose an insured in the Chitaldrug district pays rain-insurance premium at Re. 1 per annum. On an average there will be a partial deficiency of rainfall once in four years and the sum of Rs. 4 paid as premium by the insured during those years will be repaid to him as compensation in the year of partial failure. If it were known that the first three years would be good years and the partial failure would come only in the fourth year, then the question of interest accumulation could arise. But as it is, the failure may come at any time during the four years, *viz.*, in the first, second, third or fourth year. If the year of failure comes early, the compensation of Rs. 4 will have to be paid before the sum of Rs. 4 has accumulated and there will be loss on account of interest instead of gain. Of course, in the actual realm of facts, the rule of one partial failure in four years will not operate regularly, it being only an average. Sometimes, two or three failures may come in quick succession in the beginning and be followed by 8 or 12 years of no failure. In this case there will be considerable loss on account of interest. Similarly if there be 8 or 12 good years in the beginning and funds accumulate, there will be gain. These gains and losses on account of interest will, on the whole, balance each other. In other words, we would have in the case of rain-insurance considerable accumulated funds earning interest in certain periods when there is a long succession of favourable years, but such gains on account of interest will be swept away in other periods of large negative balances when several widespread bad seasons follow one another in quick succession.

The state as insurer should bear the cost of the concession.

It is therefore clear that the loss arising from the grant of the concession, *viz.*, the reduction of premium in the case of long-term policies, cannot be met from the interest earned on balances of the rain-insurance fund. In the beginning the state itself, which will be the insurer, will have to bear the charge—or rather the risk of loss to this small extent. According to the scheme proposed, there will be one-year policies which will pay the full annual premium, five years' policies which will pay about $\frac{14}{16}$ of the premium, and ten years' policies which will pay about $\frac{12}{16}$ of the premium. On an average all the polices may be expected to pay $\frac{14}{16}$ of the premium calculated on the one-year basis. This means a reduction of about $12\frac{1}{2}$ per cent of the premium income. Considering the importance of encouraging long-term policies with the view of popularizing the scheme and giving it a fair trial in favourable circumstances, it

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is not too much to require the state to take this risk, specially as the pecuniary liability thus undertaken in the initial stages of the scheme cannot be heavy.

Future readjustment.

Of course, when the long-term polices become popular and almost all the policies taken out are on a ten years' basis, the rates may have to be readjusted a little, the concession for long-term polices being somewhat reduced. But under such circumstances there will be no difficulty in doing so.

CHAPTER IX.

Miscellaneous Considerations.

A FEW miscellaneous points which have not been discussed in the previous chapters will be now taken up for consideration.

WHO CAN INSURE ?

Insurance by individual proprietors.

It has already been explained in the first chapter that as regards the financial soundness of the scheme, it is immaterial who the policy-holder is. The premium as calculated, is a fair consideration for the risk that is undertaken by the insurer, *i.e.*, the state. Whether the insured enters into a contract for genuine insurance purposes or in a spirit of gambling, does not in any way affect the position of the insurer in respect of financial gain or loss. But the state cannot encourage or participate in a scheme which is one of gambling. It is therefore necessary to restrict the benefits of Agricultural Insurance or rain-insurance only to those who are directly interested in the out-turn of crops. The rule therefore should be that only the person to whom the crops of a particular field belong should be eligible to take out an insurance policy in respect of that field. In the case of absentee proprietors who allow *raiyats* to cultivate their fields on condition of a certain portion of the gross yield being made over to them, the insurer may be either the proprietor who

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gets the fixed share or the *raiyat* who retains the balance. In this case, both are directly interested in the out-turn. But the creditors of an indebted agriculturist should *not* be allowed to take insurance polices in respect of the agriculturist's fields. It may be true in certain cases that the greater part or even the whole of the out-turn of the *raiyat's* fields practically belongs to the *sowcar* or money-lender. But in such cases what the *raiyat* has to pay to his creditor is fixed independently of the out-turn of his fields and therefore the creditor is not directly interested in the out-turn. The cultivator is liable to pay the amount due to the creditor whether he gets the full crop or not. Of course, for practical purposes, the creditor, in the majority of cases, gets paid or not according as the yield of crops is satisfactory or otherwise. For this reason it may be to the interest of the creditors to get the fields of the indebted agriculturist insured. He can help the agriculturist in doing so by mutual arrangement. But the state as insurer should recognize only the actual cultivator as the party to whom compensation is payable. It should be paid to the cultivator himself and he should be free to dispose of it just as if it were the value of the produce of his fields. The *raiyat's* creditor may get a certain part of the compensation money towards the payment of his dues, if it suits the *raiyat* to make such payment. But no arrangement can be sanctioned by the state by which the whole of the compensation money will go to the creditor without the agriculturist getting any benefit from the insurance scheme. This remark applies to mortgagees of the *raiyat's* lands as well as to other creditors.

Insurance by co-operative socities or insurance associations.

The principle that it is only the person to whom the crops directly belong that can be allowed to take an insurance policy in respect of the fields concerned, does not necessarily mean that each petty agriculturist cultivating a few acres should go up for a small policy on his own behalf. The co-operative society of a village may take a poli- of Agricultural Insurance in respect of all the lands in the village. If the co-operative societies are unable to take up the work, separate insurance associations may be formed. If this course is adopted, the work of the insurance office will be greatly simplified as it will get business in comparatively large blocks instead of having to enter into a vast number of petty contracts. By taking up insurance in combination either through co-operative societies or special associations, considerable advantage may also be secured for the individual *raiyat*. For any causal or unavoidable delay in any particular year in paying his premium, the insurance contract will not be necessarily nullified. The individual *raiyat's* premium will be advanced from the general funds of the society or association under well-defined conditions. The association can also gain some advantage by taking a long-term policy for the whole village, premium being recovered at the annual rate from some of the individual members who do not or cannot go in for long-term contracts. Of course in cases in which a whole village takes up an insurance policy through its co-operative society or insurance association, the insurance office will be in business relation only with the society or association, the subsidiary accounts between that body and individual insured cultivators being entirely a matter for those parties.

THE INSURABLE UNIT.

A man who is the proprietor of the crops grown on certain fields should have facilities for insuring those crops whether the fields make up a complete survey number or a number of complete survey numbers. Under the revenue rules in force, the owner of a part of a survey number has, under certain circumstances, the right of paying the revenue on his part of the survey number separately to the village officer. He should be free to take an insurance policy on the fields for which the revenue is separately payable and of paying the insurance premium along with the land revenue. Of course, for practical working it would be very desirable to have as large units as possible for insurance purposes. But as sound ideas regarding insurance will spread only slowly amongst the masses, it is very desirable that any agriculturist who is convinced of the advantages of insurance should have immediate facilities for giving effect to his desire instead of having to wait for the concurrence of others. In this view, proposals even in respect of small areas should be encouraged at least in the initial stages of the scheme.

A part of a survey number should be eligible for insurance.

WET LANDS AND GARDENS.

The system of Agricultural Insurance has been developed in the foregoing chapters chiefly with reference

Wet lands and gardens may be included in the scheme.

to the requirements of dry lands, *i.e.*, lands on which only rain-fed crops are grown. Of course, it is not feasible to correlate the yield of crops irrigated from channels and large reservoirs, with local rainfall. Dr. Coleman has very kindly drawn my attention to this fact. He says, "A large part of our paddy area is channel-fed and the amount of water available for irrigation does not depend upon the rainfall in the taluks where such crops, are grown, but upon the rainfall in the *malnad* of Mysore or in Coorg. With regard to tank-fed crops, the supply of water available in very many cases does not depend so much upon the rainfall during the year in which the crops are grown as upon that of the north-east monsoon of the previous year. If the tanks are filled by the rains of October and November, crops of paddy and sugar-cane for the following year are, in very many cases, assured even if the rainfall during that year should be very much below normal. This is, of course, not universally the case as many of the smaller tanks hold only sufficient water for one season's crop and their usefulness as irrigation reservoirs depends on their being filled frequently." Fortunately, lands irrigated by channels drawn from perennial rivers or large reservoirs are not those that require insurance protection as an urgent measure. It is wet lands under minor tanks that require such protection. In the case of these tanks, it may be held that local rainfall decides their irrigating capacity and the yield of lands under them. There can be no question that if the rainfall is in defect by more than 35 per cent of the normal, the out-turn of wet and garden lands under minor tanks will suffer to a considerable extent. It is true that in the case of wet and garden lands the compensation that is payable will not, in many cases, approach the loss in net income to the agriculturist. But the compensation will be proportionate to the premium paid. And, as some compensation is better than nothing, it will be seen that the extension of the scheme to wet lands and gardens, specially to those under minor tanks, will be a decided advantage.

TRANSFER OF LANDS.

Insurance policy to be invariably transferred with the land.

It must be made a rule in our system of Agricultural Insurance that when a field is transferred from one person to another and such transfer involves the transfer of ownership of the crops standing thereon or to be grown thereon in future, the insurance policy, if any, on the field should be also transferred to the new proprietor. It will cause complication and defeat the object of insurance if compensation is to be paid in any case to past proprietors of fields and not to the proprietor at the time when the compensation becomes payable. In fact, the compensation is to be regarded in every case as the produce of the land. If the rainfall is satisfactory, the produce comes from the land itself. If the rainfall is unsatisfactory, the return comes from the insurance office. In any case, the compensation money should belong to the party who has the right to take the produce of the land. The fact of a field being insured and the insurance

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premium on it having been paid, will be a factor in determining the price or consideration for which the land is transferred.

COMMUTATION OF PREMIUM.

All future premia should be commutable to a single payment at any stage.

It should be open to insurers to commute at any time into a single payment all the annual premia payable in future years in respect of a long-term insurance policy. It has been explained in the eighth chapter that the premium payable for a five years' policy will be 16 annas in the first year and 13 annas each year from the second to the fifth year, taking the single year rate at 16 annas. This amounts to a total payment of Rs. 4-4-0 against Rs. 5-0-0 the full amount for five years at the single year rate. If a man desires to commute into a single payment all the premia payable during the five years, the amount payable by him should be the aggregate present value of 16 annas payable at present and 13 annas payable at the beginning of the second, third, fourth and fifth years, the rate of interest being taken at 5 per cent, convertible half-yearly. This amount will come to Rs. 3-14-0. By similar calculation, the lump-sum payment at the beginning for a ten years' contract will be Rs. 6-1-5 against Rs. 10-0-0 at the full single year rate each year or Rs. 7-6-0 at the concessional rates payable year by year for a decennial contract.

On similar terms, a man holding a long-term policy may exercise the option of commuting all the remaining premia of the period of contract into a single payment.

The foregoing arrangements will be useful inasmuch as they will enable an agriculturist, in a year of exceptionally good harvest, to utilize a part of his net income from the fields either in taking out a paid up insurance policy for a number of years or in paying up the future premia of an existing long-term policy.

UNIVERSAL AGRICULTURAL INSURANCE.

Compulsory insurance should not be attempted at this stage.

In the present state of education of the agricultural population, it would be too sanguine to hope that a scheme of Agricultural Insurance would spread rapidly. To enter into an insurance contract of this nature requires forethought, imagination, judgment and power of calculation in a fairly developed form and these are absent at present in the case of the great majority of our *raiyat* population. But if the scheme is sound, its benefits will be gradually recognized, and the operation of the scheme will spread with the lapse of time. Of course, the ideal condition would be attained only when every field in the state is protected by a policy of Agricultural Insurance. But this happy goal is to be reached by patient propagandism, by operating a sound voluntary scheme in the sole interests of the agricultural population and by the education of those most interested in it. Any measure involving the least compulsion to hasten the progress, whatever might be said in favour of it in other countries, would be fatal to the growth of Agricultural Insurance in an Indian state. Much as one would like to see the strong wall of

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Agricultural Insurance rise up between the Indian agriculturist and the abyss of famine on the brink of which he walks throughout his life, the realisation of such a means of protection, strong, continuous, and effective, can be seen at the present time only through a vista of decades of patient and laborious work.

CHAPTER X.

A Comprehensive Scheme for the Mysore State.

Determination of frequency of deficiency years for all districts.

IN the sixth chapter we considered the cases of all the taluks in the Chitaldrug district and arrived at conclusions regarding the most important points of an Agricultural Insurance contract on the basis of rainfall statistics of that district. We found that in that district we might regard a rainfall below 65 per cent of the normal as deficient for the purposes of Agricultural Insurance both for the January-July and the January-October periods. On that supposition, the deficiency periods numbered about 11 in a total of 80 periods; *i.e.*, roughly speaking, in four years embracing eight periods, there was, on an average, failure in one January-July or January-October period. In this chapter we propose to deal similarly with the other seven districts so that a comprehensive system of insurance may be arrived at for the whole of the Mysore State.

Method of the sixth chapter applied.

The method adopted will be the same as that applied in Chapter VI. Let F1 represent failure of rainfall in the January-July period and F2 that in the January-October period. In the case of each taluk head-quarters station, the number of F1 and the number of F2 will be found out by taking into account the rainfall statistics of all years for which reliable records are available. The period for which reliable records are available varies from twenty years to forty-three years in the several taluk headquarters stations and it is therefore necessary to deduce from the total number of failures, *viz.*, the sum of F1 and F2, the proportionate number in a period of forty years. The number thus deduced represents the number of deficiency periods which may be reasonably expected to occur in the taluk concerned in forty years or eighty periods. This number will be arrived at on the basis of regarding as a deficiency period one in which the rainfall is less than 65 per cent of the normal. The normal rainfall for a station must, of course, be taken as the figure arrived at, after applying to the existing statistics the checks described in Chapter V. The rainfall normals for all the taluks as accepted for our purposes and the process by which they are arrived at are shown in Appendix I.

The tables arranged according to taluks for all the districts containing the results of investigations conducted on the lines indicated above are given in the following pages together with the conclusions arrived at in the case of each district. The statistics of rainfall from which the figures for each taluk are deduced will be found in Appendix II. From these statistics it is easy to prepare similar tables on any basis other than the 65 per cent basis or the 35 per cent deficiency basis adopted here.

BANGALORE DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Bangalore ..	6 F1+3 F2= 9	43	9×40/43=9	
Hoskote ..	3 F1+0 F2= 3	27	3×40/27=5	Period too short
Dodballapur ..	4 F1+4 F2= 8	29	8×40/29=11	
Nelamangala ..	5 F1+6 F2=11	36	11×40/36=12	
Kankanhalli ..	6 F1+4 F2=10	31	10×40/31=13	
Magadi ..	7 F1+5 F2=12	40	12×40/40=12	
Closepet ..	Nil	20	Nil	Period too short
Anekal ..	6 F1+2 F2 = 8	28	8×40/28=11	
Devanhalli ..	4 F1+1 F2= 5	23	5×40/23=9	
Channapatna ..	1 F1+1 F2= 2	19	2×40/19=4	Period too short

The whole district clearly comes within the group 11±2; only Channapatna, Closepet and Hoskote give eccentric figures. For the two former, rainfall statistics are available only for 19 and 20 years respectively and this may be the reason why the frequency figures do not fall into line with those of the rest of the district. For Hoskote, statistics are available for 27 years and this also is a short period. As, however, the three taluks, are surrounded on all sides by 11±2 areas, they have been included in that area. From a study of the Meteorological conditions of these taluks there does not appear to be any reason why they should be different from the surrounding tracts as regards the frequency of years of deficient rainfall.

KOLAR DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Kolar ..	3 F1+6 F2= 9	43	9×40/43=9	
Bowringpet ..	3 F1+1 F2= 4	20	4×40/20=8	
Chintamani ..	7 F1+3 F2=10	41	10×40/41=10	
Mulbagal ..	3 F1+2 F2= 5	20	5×40/20=10	
Sidlaghatta ..	7 F1+6 F2=13	41	13×40/41=13	
Chikballapur ..	7 F1+4 F2=11	42	11×40/42=10	
Bagepalli ..	2 F1+3 F2= 5	20	5×40/20=10	
Goribidnur ..	6 F1+3 F2= 9	30	9×40/30=12	
Malur ..	2 F1+0 F2= 2	20	2×40/20=4	Period too short
Srinivaspur ..	7 F1+2 F2= 9	28	9×40/28=13	
Gudibanda ..	5 F1+4 F2= 9	28	9×40/28=13	

The whole of the district falls well within the 11±2 zone. The eccentric figure of Malur is evidently due to the rainfall statistics being available only for 20 years.

TUMKUR DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Tumkur ..	6 F1+6 F2=12	42	12×40/42=11	
Maddagiri ..	4 F1+3 F2= 7	30	7×40/30=9	
Chiknayakanhalli	7 F1+4 F2=11	34	11×40/34=13	
Sira ..	3 F1+4 F2= 7	20	7×40/20=14	
Gubbi ..	6 F1+6 F2=12	43	12×40/43=11	
Tiptur ..	5 F1+2 F2= 7	32	7×40/32= 9	
Pavagada ..	9 F1+3 F2=12	43	12×40/43=11	
Kunigal ..	3 F1+5 F2= 8	37	8×40/37= 9	
Koratagere ..	4 F1+2 F2= 6	24	6×40/24=10	
Turuvekere ..	4 F1+5 F2= 9	30	9×40/30=12	

The whole district falls well within the zone of 11±2 and none of the taluk figures call for any remarks.

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MYSORE DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Mysore ..	6 F1+3 F2= 9	43	9×40/43= 9	
Chamrajnagar ..	9 F1+2 F2=11	30	11×40/30=14	
Seringapatam ..	5 F1+4 F2= 9	41	9×40/41= 9	
Hunsur ..	3 F1+1 F2= 4	42	4×40/42= 4	
Yedatore ..	4 F1+7 F2=11	43	11×40/43=10	
Heggaddevankote	6 F1+2 F2= 8	30	8×40/30=11	
Gundlupet ..	4 F1+4 F2= 8	36	8×40/36= 9	
Nanjangud ..	5 F1+4 F2= 9	30	9×40/30=12	
T.-Narsipur ..	9 F1+2 F2=11	42	11×40/42=11	
Malvalli ..	7 F1+7 F2=14	40	14×40/40=14	
Mandya ..	7 F1+1 F2= 8	30	8×40/30=11	
Krishnarajpete	5 F1+7 F2=12	41	12×40/41=12	
Nagamangala ..	4 F1+6 F2=10	38	10×40/38=11	

The taluk of Hunsur to the extreme west and bordering on Coorg gives, as may be expected, a low figure. Trough the actual figure is 4, there are several years in which the rainfall from January to July is just a few cents above the 65 per cent limit and for this and other reasons the taluk may be placed in the 7±2 area. The rest of the district falls within the 11±2 zone with striking uniformity.

HASSAN DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Hassan ..	4 F1+4 F2=8	42	8×40/42=8	
Manjarabad ..	0 F1+1 F2=1	27	1×40/27=2	
Arkalgud ..	2 F1+0 F2=2	27	2×40/27=3	
Belur ..	2 F1+1 F2=3	27	3×40/27=5	
Channarayapatna	2 F1+2 F2=4	27	4×40/27=6	
Arsikere ..	2 F1+2 F2=4	27	4×40/27=6	
Hole-Narsipur ..	2 F1+1 F2=3	27	3×40/27=5	
Alur ..	1 F1+0 F2=1	10	1×40/10=4	

The western taluks of Manjarabad and Arkalgud and the sub-taluk of Alur naturally fall within the 3±1 zone. The rest of the district is well within the 7±2 area.

SHIMOGA DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Shimoga ..	3 F1+2 F2=5	43	5×40/43=5	
Channagiri ..	4 F1+4 F2=8	40	8×40/40=8	
Honnali ..	3 F1+2 F2=5	43	5×40/43=5	
Shikarpur ..	4 F1+5 F2=9	40	9×40/40=9	
Sorab ..	5 F1+4 F2=9	40	9×40/40=9	
Sagar ..	3 F1+2 F2=5	28	5×40/28=7	
Nagar ..	1 F1+0 F2=1	39	1×40/39=1	
Tirthahalli ..	2 F1+0 F2=2	43	2×40/43=2	
Kumsi ..	2 F1+0 F2=2	30	2×40/30=3	

In the case of this district, there is a compact block comprising the taluk of Tirthahalli and the sub-taluk of Kumsi within the 3±1 area. The rest of the district except Nagar is within the 7±2 belt. Nagar which is a taluk of abnormally high rainfall (about 201 inches a year) has only one deficiency period in 40 years or 80 periods. It may be left out of the scheme or included in the 3±1 area.

KADUR DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Chikmagalur ..	5 F1+2 F2=7	43	7×40/43=7	
Kadur ..	5 F1+3 F2=8	30	8×40/30=11	
Tarikere ..	2 F1+1 F2=3	33	3×40/33=4	
Koppa ..	1 F1+1 F2=2	32	2×40/32=3	
Mudgere ..	1 F1+0 F2=1	33	1×40/33=2	
Narasimharajpura (Yedehalli)	1 F1+0 F2=1	24	1×40/24=2	
Sringeri ..	1 F1+0 F2=1	10	1×40/10=4	

The district divides itself into two main parts, the western falling within the 3±1 area and the eastern within the 7±2 zone. The taluk of Kadur, as might be expected from its geographical position, is within the 11±2 area. The figure for Tarikere is4 but with longer experiences the taluk will probably come within the 7±2 zone.

CHITALDRUG DISTRICT.

Sixty-five per cent rainfall basis or 35 per cent rainfall deficiency basis.

Names of taluks	Number of deficiency periods	Number of years for which rainfall statistics are available	Reduction to 40 years' basis	Remarks
1	2	3	4	5
Chitaldrug ..	5 F1+5 F2=10	43	10×40/43=9	
Challakere ..	7 F1+5 F2=12	40	12×40/40=12	
Hiriyur ..	7 F1+6 F2=13	38	13×40/38=13	
Holalkere ..	6 F1+3 F2= 9	39	9×40/39=9	
Davangere ..	4 F1+5 F2= 9	36	9×40/36=10	
Molakalmuru ..	4 F1+4 F2= 8	27	8×40/27=12	
Jagalur ..	6 F1+3 F2= 9	41	9×40/41=9	
Hosdurga ..	5 F1+2 F2= 7	29	7×40/29=10	
Harihar ..	4 F1+3 F2= 7	21	7×40/21=13	

The whole district falls within the 11±2 zone with striking uniformity. The table already worked out in Chapter VI is given here in the same form as that adopted for other districts for the sake of uniformity.

Striking result.

It will be seen from the foregoing tables that the taluks in the Mysore state fall within three well-defined groups according to the frequency of years of deficient rainfall. In the first group, the number of deficiency periods in 40 years or 80 periods is 11 ± 2, in the second 7 ± 2 and in the third 3 ± 1. Appendix III gives a list of taluks arranged according to districts shewing in which group every taluk falls, and Appendix V is a map of the Mysore state shewing the three distinct areas. It will be observed that all the *maidan* taluks are included in the first group, most of the *malnad* taluks in the last group, and there is an intermediate belt between the two included in the middle group. The fact that the state divides itself so definitely into three continuous and well-marked zones according to the frequency of years of rainfall deficiency, is one of the most striking results of these investigations.

It will be seen that in the foregoing classification there is a slight overlapping between the class represented by 11 ± 2 and that represented by 7 ± 2. The areas in which the number of failures in 80 periods is exactly 9 may come under either class. In the case of such areas they have been placed in the 11 ± 2 class or 7 ± 2 class according to the nature of the surrounding areas. As a matter of fact, only Sorab and Shikarpur out of the taluks in which the number of deficiency periods is exactly 9 have been placed in the 7 ± 2 class, the others being all placed in the 11 ± 2 area.

prepared to undertake if it starts a system of Agricultural Insurance, it would not be right or safe to assume a very limited degree of popularity of the scheme. The scheme must be safe and must not at any time necessitate the incurring of a debit balance beyond the capacity or convenience of the state even if it attains a fair measure of popularity. For these reasons we shall assume, for purposes of calculation in this chapter, that 25 per cent of lands of all classes were insured under the scheme during the ten years to which the calculation relates.

Twenty-five per cent of lands assumed as insured for purposes of calculation.

The rate of interest which can be earned on the funds of the scheme will be assumed to be 4 per cent. per annum.

On the basis of the foregoing hypotheses, tables have been prepared for each taluk shewing the financial results which would have followed from the Agricultural Insurance scheme if it had been in operation from 1st January 1898 to 31st December 1907. These tables are given in Appendix IV. The principles adopted in preparing these tables will be clear from the following specimen table relating to the Bangalore taluk :—

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Financial results to the State of the Agricultural Insur

BANGALORE

Year	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation paid		
			January to July	January to October	Total
a	*b*	*c*	*d*	*e*	*f*
1898 F1	..	34,823	1,39,292	..	1,39,292
1899	—105,745	34,621	..	..	..
1900	—74,315	34,461	..	..	..
1901	—41,792	34,181	..	..	..
1902	—8,257	34,269	..	..	..
1903 F2	26,709	34,446	..	1,37,784	1,37,784
1904	—76,823	34,413	..	..	..
1905	—44,450	34,399	..	..	..
1906	—10,797	34,399	..	..	..
1907	24,202	39,342	..	..	..

F1 means failure of rain during the January to July ance scheme if it had been in force from 1898 to 1907.

TALUK.

Interest addition		Remarks	Year
$\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year		
g	*h*	*i*	*a*
—1,276	—1,05,745		F1 1898
—3,191	—74,315		1899
—1,938	—41,792		1900
—646	—8,257		1901
697	26,709		1902
—194	—76,823		F2 1903
—2,040	—44,450		1904
—746	—10,797		1905
600	24,202	In column *c* the figure for 1906 not being available, the figure for 1905 has been taken.	1906
2,148	65,692		1907

period and F2 during the January to October period.

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Calculation of interest.

The only point which requires any explanation in connection with these tables is the calculation of interest in column g. The interest for any year is arrived at thus :—As fresh premia are payable on any date up to 31st March, it is safe for purposes of calculation to neglect any small interest on premia which may be paid before that date. So, for the months from January to March, interest is calculated only on the opening balance. This gives the product $3b$. From April to July interest will accrue on the sum of the opening balance and the year's premia. This gives $4(b+c)$. From August to October interest accrues on the balance at the end of July minus any amount which may have been paid as compensation for the January-July period. This gives $3(b+c-d)$. During November and December interest accrues on the balance at the end of October minus any amount which may be paid as compensation for the January-October period. This gives $2(b+c-d-e)$. These products are month-rupees. Adding them up we get their sum thus :—

$$\begin{array}{l} 3b \\ 4b+4c \\ 3b+3c-3d \\ 2b+2c-2d-2e \\ \hline 12b+9c-5d-2e \\ \hline \end{array}$$

The interest on 100 rupees for 12 months being 4 rupees, the interest on a month-rupee is $\frac{4}{1200}$ or $\frac{1}{300}$. The interest therefore amounts to

$$\frac{12b+9c-5d-2e}{300}$$

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CHAPTER XI.

Financial Result.

Result of the decennium 1898-1907 to be worked out to give a concrete illustration of financial results.

It would be interesting to work out in detail the financial result of the working of the scheme of Agricultural Insurance as formulated in this treatise for a number of years in the Mysore State. As the actual financial result depends on rainfall, it is not possible to make any such calculations with reference to the future. But it is easy to find out what the result of the scheme would have been if it had been in operation for a number of years past in any particular taluk or district or in all parts of the state. In this chapter it is our object to calculate the result for a period of ten years from 1898 to 1907 in respect of all the taluks of the state. This will enable us to form a correct idea of the extent and magnitude of financial transactions by undertaking which the state may be regarded as having given general effect to the scheme.

Magnitude of financial operations will depend on the degree of popularity of the scheme.

Before the financial results can be worked out in the way suggested above, we must make an assumption as to the extent to which the scheme may be held to have been in operation during the period. It will be easily understood that if the scheme be held to have been very popular during the period so that almost all fields were insured, the scale of operations would be very large and the receipts and disbursements of the fund during the period would be of vast magnitude. In our scheme, the annual insurance premium has been taken as equal to the annual assessment. The annual assessment of dry, wet and garden lands for the whole of the Mysore State including those within *Inam* villages being nearly a *crore* of rupees, the magnitude of operations in a scheme of Agricultural Insurance so popular as to be practically universal would be very large. Premium receipts would amount to about 100 lakhs of rupees per annum and the payments on account of compensation in a bad year may be 300 or 400 lakhs and may, in the worst case of a failure all over the state in both the January-July and January-October periods, amount to as much as 800 lakhs of rupees. On the other hand, if for purposes of calculation, the scheme be assumed not to have been popular during the period in question so that there were only a few policy-holders here and there, the financial operations in connection with the scheme would be on a very small scale and the resulting debit or credit balance of the fund at the end of the period would be small. It must be admitted that for many years at the beginning, the actual state of affairs would more nearly approach the last-mentioned condition than that referred to first. People of the *raiyat* class will be convinced of the usefulness of insurance only by slow degrees. But to gauge the financial results of the scheme with the view of ascertaining the magnitude of operations which the state must be

The premium receipts are taken as one-fourth of the assessment of the taluk on dry, wet and garden lands on the assumption referred to above that one-fourth of the lands were insured.

The 68 taluk statements have been then grouped according to districts in separate tables bringing out the result in each district.

Finally, the district balances have been tabulated in one statement bringing out the financial result of the working of the scheme throughout the whole state during the ten years in question. This table is given below :—

Financial result to the state of the Agricultural Insurance scheme if it had been in force in all the districts of the Mysore state from 1898 to 1907.

Districts	Receipts	Outgoings	Net result, receipt or outgoing	Remarks
	Rs.	Rs.	Rs.	
Bangalore ..	27,40,160	17,06,928	10,33,232	
Kolar	31,86,236	15,12,096	16,74,140	
Tumkur	29,44,048	23,01,196	6,42,852	
Mysore	44,97,321	37,30,732	7,66,589	
Hassan	30,20,843	10,83,230	19,37,613	
Shimoga	32,21,344	16,80,564	15,40,780	
Kadur	17,75,074	13,11,699	4,63,375	
Chitaldrug ..	20,06,277	9,59,368	10,46,909	
Total for the state ..	2,33,91,303	1,42,85,813	91,05,490	

The foregoing table shews that the net result of ten years' operation of the scheme on the basis of 25 per

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cent of all wet and dry fields and gardens being insured would have been as follows :--

	Rs.
Total premium receipts ..	2,17,29,260*
,, interest ,, ..	16,62,043*
Total receipts	2,33,91,303
Deduct premia payments ..	1,42,85,813
Balance	91,05,490

In other words, a sum of about 91 lakhs would have accumulated as a balance in favour of the Agricultural Insurance fund. It is hardly necessary to state that no part of this amount could be regarded in the light of a profit; the period under consideration being somewhat more favourable than the average, the receipts are in excess of the disbursements. The balance accumulated in this way would, in the long run, be swept away in adverse years in which a much larger sum than the premium receipts would have to be paid as compensation. It is also clear from the statement that during the decennium in question a sum of about 143 lakhs would have been distributed as compensation to the *raiyats*.

The financial results as here worked out are satisfactory, shewing that at the end of a decade of operations the fund would have been in a strong position to meet any probable demands that might arise on account of compensation and that adequate compensation would have been paid in all cases coming under the rules during the whole period.

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* These figures can be arrived at only from the details of the taluk tables given in Appendix IV.

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CHAPTER XII.

Rules for Practical Working.

It has been our object to make the scheme of Agricultural Insurance advocated in this treatise thoroughly practical. All details have been thought out as far as practicable both as regards the scheme itself and its practical working, so that if it is decided to try the scheme in any particular area, effect may be given to it at once. A set of rules for practical working is therefore given in this chapter. The rules have been framed with reference to the circumstances of the Mysore State but they may be adopted with suitable alterations in any other place. These rules embody the principles arrived at in the foregoing chapters and are so simple as to hardly require any explanation.

PROPOSED RULES FOR THE MYSORE STATE AGRICULTURAL INSURANCE SCHEME.

The work of the Mysore state Agricultural Insurance scheme sanctioned in Government Order No. dated shall be conducted under the following rules.

General reservation of power.

The Government reserve to themselves the right to add to or modify these rules and the rates contained in the tables appended thereto at any time; but such addition or modifi-

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cation shall have no retrospective effect as regards any contract effected before the date of such alteration.

In these rules—

Definitions.

The term "Field" includes gardens and any other land from which agricultural produce is regularly derived.

The term "Year" means the English calendar year beginning on 1st January.

The term "Proposer" means the person whose fields are proposed to be insured under these rules.

The term "Policy" means the written document containing the contract for the payment, under these rules, of a certain sum of money on the occurrence of the contingency specified therein in consideration of the premium paid by the insured.

The term "Insured field" means a field in respect of which a policy has been issued under these rules.

Management.

The scheme of Agricultural Insurance shall be kept separate from other insurance schemes of the Mysore Government. It will be managed by a committee of officials and non-officials appointed by Government in which the Financial Secretary, the Revenue Commissioner, the Director of Agriculture and the Meteorological Reporter to Government shall be included. The accounts and other books of the Agricultural Insurance scheme shall be maintained according to rules and in forms prescribed by Government.

Guarantee.

The amount insured by policies issued under these rules shall be payable from the Mysore revenues.

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take immediate action when inspection is delayed or defects detected in a rain-gauge are not set right at once.

The rain-gauges will be so located that they can be properly guarded day and night by the treasury guard or any other guard specially appointed for the purpose. Any person attempting to approach the rain-gauge without lawful excuse will be prosecuted.

Policy-holders may apply for special testing.

Any policy-holder may apply to the committee to get the rain-gauge of his taluk tested in public and the committee will grant such application if, in their opinion, there are any grounds whatever for doing so.

Daily measurement of rain.

At a fixed hour every day the rainfall at each taluk headquarters will be measured by the person appointed for the purpose. A bugle will be sounded half-an-hour before the measurement time so that such of the policy-holders or their representatives as may desire may attend and observe the measurement. The daily figure and the progressive total of rainfall from 1st January will be posted in bold figures in English and Kannada at a prominent place in the taluk *cutcherry* over the signature of the Amildar or the Sheristadar.

Complaints about measurements.

Any policy-holder wishing to make any complaint about the methods of measurement or record of rainfall or any other matter affecting or likely to affect his claims in respect of his Agricultural Insurance policy, may lodge such complaint in writing before the

Secretary, Agricultural Insurance Committee. The decision of the committee on such complaints will be final.

Daily rainfall returns to Agricultural Insurance office.

The measurer at each taluk headquarters will send a daily return of rainfall to the Secretary, Agricultural Insurance Committee. The Secretary will tabulate the figures and after agreeing the monthly and progressive totals with the records of the Meteorological and Revenue Departments publish in the *Gazette* the figures finally accepted by the committee.

Payment of compensation.

After 31st July and 31st October each year, the Secretary will publish in the *Gazette* a list of all taluks in which compensation is payable and a detailed statement by taluks shewing the amount payable in respect of each policy. Payments will be made by Amildars as early as practicable, the amount paid in respect of each policy being noted on the reverse of it. Policies the terms of which have expired, will be taken back at the same time.

Facilities for payment.

As far as possible, subsidiary rules will be framed facilitating the payment of premia by policy-holders through village officers along with land revenue or through the Post Office or by other means. At the request of policy-holders compensation amounts will also be sent through the Post Office under proper safeguards.

The accounts of the Agricultural Insurance scheme will be audited every year and an abstract of the audited

CSL

Nature of insurance.

The policies issued under the scheme provide for the grant of compensation according to the scale specified in the table appended to these rules, if the rainfall from the 1st January up to the 31st July is deficient beyond a certain specified degree. A further amount of compensation is payable if the rainfall from the 1st January up to the 31st October is also deficient beyond a certain specified degree. The scheme provides for contracts holding good for one year, five years or ten years subject to regular payment of premium.

What fields can be insured and by whom ?

Only fields within the Mysore State can be insured under these rules. The *bona fide* owners or cultivators of such fields who are entitled to receive the whole or any part of the produce of those fields can apply for insurance. Proposals will not be entertained from persons having no right to any part of the produce.

Duly registered co-operative societies and insurance associations can also apply for protecting the fields of all or any of the members or prospective members of such societies or associations.

Minimum limit of policies.

Any proposal in respect of which the premium payable for the first year is less than Rs. 4 will not be considered. There is, however, no objection to owners of small holdings combining together and applying for insurance jointly.

Any person who wishes to insure his fields under these rules, shall obtain the requisite proposal form

GSL

Procedure for applying for insurance.

(*vide* next chapter) from any district or taluk treasury. A proposal form will be supplied free to any person at such treasuries on application to the officer in charge either by letter or in person.

The proposer will fill up and sign the form and obtain on it a certificate signed by a Government employee or a village officer stating (*a*) that the proposer is the owner or cultivator of the fields specified in the proposal and entitled to the whole or any part of the produce thereof, and (*b*) that all statements made in the proposal form are, to his knowledge and belief, correct. The proposer will then send the proposal with its accompaniment to the Amildar of the taluk who will forward it to the Secretary to the Agricultural Insurance Committee with the necessary endorsement.

Payment of first premium and issue of policy.

When a proposal for Agricultural Insurance has been accepted, due notice thereof in writing shall be sent by the Secretary to the Agricultural Insurance Committee without delay to the proposer calling upon him to pay into any Government treasury the first yearly insurance premium as has been agreed upon before the next 31st day of March and to forward the treasury receipt therefor to the Secretary. On receipt of the said treasury receipt, an Agricultural Insurance policy shall be prepared in the appropriate policy form (*vide* next chapter) signed by the Secretary to the Committee and forwarded to the insured by registered post. If the proposal has been rejected or

CSL

otherwise dealt with, the Secretary shall communicate the fact to the proposer.

When an insurance policy becomes a legal contract.

An Agricultural Insurance policy becomes a legal contract from the date of payment of the premium, provided such payment is made before the 31st March, notwithstanding the issue of the policy on a different date or after the 31st March. If the payment is not made before the 31st March, the policy will be issued with reference to the year beginning with 1st January following.

Payment of subsequent premium.

In the case of long-term policies, the premium for each year after the first shall be paid before the 31st March of that year. The premium may be paid into any district or taluk treasury and the treasury *challan* shall be sent at once by the payer to the Secretary, Insurance Committee. The Treasury Officer will record an endorsement on the back of the policy in the proper place specifying the date and amount and reference to the credit entry in the treasury accounts.

Effect of non-payment of premium.

An Agricultural Insurance policy extending beyond one year the premium due on which for any year has not been paid before the 31st of March of that year, shall lapse and all future claims in respect of it forfeited. Claims in respect of years for which premium has been paid before 31st March will, of course, be paid.

In lieu of a lapsed policy, a new policy may be issued without a fresh proposal on application by the owner of the fields concerned accompanied by the lapsed policy.

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How a lapsed policy may be revived.

The new policy will be treated as such for the purpose of fixing the amount of premium, and it must be taken for a full term admissible under the rules commencing from the first year of the new policy.

Rain-gauges to be tested and guarded.

The rainfall as measured by the rain-gauges at the several taluk *cutcherries* will be the basis of all compensation payments under the Agricultural Insurance scheme. Strict and effective steps will be taken to keep these gauges in good condition. In taluk headquarters where the situation of the taluk *cutcherry* is such that a rain-gauge cannot be conveniently located near it, a rain-gauge fixed in any other convenient place will be used with the special sanction of Government.

As soon as any defect is noticed in a rain-gauge, the matter should be reported to the Meteorological Reporter by the Amildar and the defective rain-gauge sent to him for repair or replacement. To avoid all risk of break-down, a spare complete rain-gauge will always be kept at each taluk headquarters in the personal custody of the taluk Treasury Officer.

All gauges will be inspected thoroughly once a year by a gazetted officer of the Revenue Department according to definite instructions to be laid down by the Meteorological Reporter to Government. A certificate to the effect that the gauge has been tested and found correct (or rectified or repaired) by the inspecting officer will be hung up suitably mounted in a safe and conspicuous place in the taluk office. The Agricultural Insurance office will maintain a record of such certificates and

CSL

Miscellaneous.

accounts will be published for the information of the public.

The Government of His Highness the Maharaja do not desire to derive any profit from the Agricultural Insurance scheme and its funds will not be appropriated for the general purposes of Government. A *pro forma* account will be maintained and the balance of the fund will be regarded as an earmarked debt-head balance in deposit with Government.

If an insured should lose his policy, a duplicate thereof may be issued to him by the committee on his paying a fee of four annas.

False information furnished by a proposer or production of any false evidence in the matter of insurance or other points connected therewith shall render his policy null and void and the premium paid by him shall be forfeited.

Approved helpers for securing business under these rules will be paid a fair remuneration, the terms of which may be obtained on application to the Secretary to the Agricultural Insurance Committee.

CHAPTER XIII.

Proposal and Policy Forms.

In this chapter we shall attempt to lay down suitable forms for proposals as well as for policies under the Agricultural Insurance scheme. By this means the practicable nature of the scheme will be demonstrated more fully than by any other method.

Each form will consist of four pages and for the sake of clearness each page of the form is printed in a separate page or separate pages of this book.

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(*First page of Proposal form*).

MYSORE STATE AGRICULTURAL INSURANCE.

PROPOSAL FOR INSURANCE.

Statement to be made by the person proposing to insure his fields.

I (a—1)..
son of (a—2) ....
being by caste a (a—3)........and by occupation a
(a—4) ....and residing at village..........
hobli.................... taluk ....
district .... declare that I am directly
interested as (a—5) ....
....
in the produce of the lands described in the attached
schedule and that (a—6) ....
annas share of such produce belongs to me in ordinary
course.

At (a—1) Enter your full name.
(a—2) Enter your father's full name.
(a—3) Enter religion, caste and sect.
(a—4) Enter the chief occupation by which you make a living.
(a—5) Enter "Proprietor," "Cultivator, for a share of the produce," or any other interest as the case may be.
(a—6) State how many annas share, 16 annas representing the full produce. If the share is not conveniently expressible in annas, state it in any other way.

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(Second page of Proposal form).

I desire to insure these lands under the MYSORE STATE AGRICULTURAL INSURANCE SCHEME of the rules of which I have made myself aware. I want to take out a policy for (a—7)........................years and to pay premium as noted in the margin before the dates prescribed in the rules. If the rainfall for the period from 1st January to 31st July or that from 1st January to 31st October be in defect of the normal by more than the percentage specified in the rules for the taluk in which the fields are situated, *viz.*, (a—8) .... per cent, then I shall get compensation according to the rules, *viz.*, (a—9)..........times the annual premium for failure of rain during each of the above periods.

19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......

I have already insured some fields belonging to me, *vide* Policy No. ...., dated ....19 .

STATION...................... SIGNATURE........
Dated the....day of........19 . Designation........

At (a—7) Enter one, five or ten years.
(a—8) Enter 35 or any other percentage shewn against the taluk in the table attached to the rules.
(a—9) Enter 4 or any other multiple shewn against the taluk in the table attached to the rules.

(*Third page of Proposal form*).

SCHEDULE OF LANDS PROPOSED TO BE INSURED.

Serial number	Village, hobli, taluk and district.	Survey number	Area	Nature of crops usually grown.	Source of irrigation	Annual *kandayam*	Nature and extent of rights of proposer in the lands.	Boundaries	Remarks

(*Fourth page of Proposal form*).

Certificate by the village officer or Government employee before whom the proposal is signed.

I certify that I have read over and explained the foregoing proposal with the instructions contained in it to the proposer, and that the proposer's signature in it was affixed in my presence. I also certify that, to the best of my knowledge and belief, his statements are correct.

STATION.................. SIGNATURE..........
Dated..............19 . *Designation*............

Amildar's certificate and endorsement.

FORWARDED to the Secretary, Mysore State Agricultural Insurance Committee, for necessary action. The foregoing certificate of (name)........ .... (designation).................. may, in my opinion, be acted upon.

STATION.................. SIGNATURE.........
Dated................*19* . *Amildar of*...........

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(First page of Policy form).

MYSORE STATE AGRICULTURAL INSURANCE.

Policy No.........

WHEREAS..................son of .... residing in village........ taluk........district ....hereinafter called the policy-holder holding the lands specified in schedule I noted overleaf, hereinafter called the insured fields, has contracted with the Government of Mysore for the payment by Government to him of compensation in respect of the insured fields on the total or partial failures of crops owing to deficiency of rain and has deposited a proposal dated the......day of........19.., and signed by him, as the basis of such contract and has also paid on ....day of......19.. into the Government treasury at..........the sum of Rupees............ being the premium in respect of such contract for the first year of contract, *viz.*, that beginning with the 1st January 19.. .

Now it is hereby declared that if the aggregate rainfall as measured by the rain-gauge at the taluk *cutcherry* at................district.............. and as accepted and notified in the official *Gazette* by the Secretary, Insurance Committee, from the 1st January to 31st July of the year 19....be less than......inches the Secretary to the said committee shall be subject and

(*Second page of Policy form*)

liable to the payment on behalf of the Mysore Government to the said.......................................
or, if the policy holder's right in the insured fields be transferred before the payment is made, to such transferee, of the sum of Rupees ....
at the taluk treasury of ....
in .... district with as little delay as possible after the 31st July 19.....

AND further that if the aggregate rainfall, measured, accepted and notified as stated above from 1st January to 31st October of the year 19. . . . be less than. . . . inches the said Secretary shall be subject and liable to the payment in a similar way of a sum of Rupees.........
at the same treasury with as little delay as possible after the 31st October 19. . . . to the policy-holder or to such other person to whom his rights may have been transferred, the two payments being independent of and made irrespective of each other.

AND further that if the annual premia as specified in the margin for the several following years be duly paid in respect of the insured fields before the 31st March of each year, then on the deficiency of rain as specified above occurring in those years during either or both the periods, *viz.*, 1st January to 31st July and 1st January to 31st October one or two instalments of compensation of the amount specified above will be paid as aforesaid to the policy-holder

19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......
19.. Rs.......

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(*Second page of Policy form*—concluded).

or to the person to whom his rights may have been transferred.

But this contract is made subject to the following proviso, *viz.*, it shall be void and the payments made by the policy-holder under it shall be forfeited if any of the statements contained in the aforesaid proposal be untrue.

Bangalore, *Secretary to the*
*The. .day of. .*19 . *Agricultural Insurance Committee.*

N.B.—This policy is granted subject to the rules issued by the Government of Mysore relating to State Agricultural Insurance.

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(Third page of Policy form).

(SCHEDULE I.)

LIST OF LANDS INSURED BY THIS POLICY.

Serial number	Village, hobli, taluk and district.	Survey number	Area	Nature of crops usually grown.	Source of irrigation	Annual *kandayam*	Nature and extent of rights of proposer in the lands	Boundaries	Remarks

(Fourth page of Policy form).

PAYMENT OF PREMIUM.

Date of payment	Treasury at which paid : taluk and district	Year to which the premium relates	Amount in figures and words	Reference to credit in treasury records	Signature of Treasury Officer	Remarks

CSL

(*Fourth page of Policy form*—concluded).

PAYMENTS OF COMPENSATION.

Date of payment	Treasury from which paid: taluk and district	Year to which the compensation relates	Whether Jan.-July or Jan.-Oct. period	Amount in figures and words	Voucher No. and date	Signatures of Treasury Officer and of policy-holder	Remarks

CHAPTER XIV.

Conclusion.

Agricultural Insurance desirable and practicable.

From what has been stated in the foregoing chapters it may perhaps be fairly claimed that certain conclusions relating to the problem of Agricultural Insurance in India have been established on the basis of facts and figures. It has been shewn that Agricultural Insurance is extremely desirable under Indian conditions, that a fairly satisfactory scheme of such insurance is practicable and that it can be brought into effect in an Indian state without much difficulty. The practical aspect of the question has always been prominently kept in view throughout the investigation and, so far as the Mysore State is concerned, all the essential calculations necessary for introducing the scheme have been made. In the case of any other state or province, if similar data are available, it will not involve much trouble or labour to prepare a definite scheme with the necessary tables of rates.

Difficulties encountered in the investigation.

On the general principles of insurance, there are many valuable works from which I have derived great help; but as regards the application of those principles to the subject of Agricultural Insurance, I have been practically forced to find my way without any guidance from the writings of past thinkers. The subject being new, required cautious treatment at every stage. The difficulties encountered in handling a vast mass of statistics not arranged for similar studies before have been enormous. Discrepancies had to be reconciled, corrections effected and sometimes a wholesale re-arrangement of the published statistics was necessary with the view of examining them from a particular point of view. It must therefore be admitted that the scheme now put forward may have deficiencies and imperfections which are inseparable from the first attempt to solve a difficult problem in a hitherto untrodden field. But no pains have been spared to make the study as thorough and complete as possible on the basis of such statistics as are available. If the scheme is introduced in some areas, improvements will no doubt suggest themselves with experience and further research.

Favourable circumstances.

There are several circumstances which make Agricultural Insurance possible and workable in an Indian state like Mysore. But for the existence of these circumstances, the introduction of such a scheme would be as difficult here as in most other countries and would perhaps be impossible. In the first place, agriculture in Mysore is dependent almost entirely on the amount and seasonal distribution of rainfall. This enables us to eliminate all personal elements from the question of Agricultural Insurance and reduce it to the practical form of rain-insurance. A second favourable condition is the existence of fairly reliable rainfall

GSL

statistics for a sufficiently long period. It would certainly have been much better if the period for which we have rainfall statistics had been much longer than it really is. But the material that we have is adequate for beginning operations. As years pass by, the volume of statistics will grow and the averages can be calculated on the basis of a longer series of years. Another favourable circumstance is the *raiyatwari* system of land tenure which prevails and the existence of taluk and village establishments under the control of the state and in intimate touch with the *raiyat* population. The combined effect of all these favourable circumstances is that it is possible to introduce rain-insurance and thereby minimise the economic disturbances created in a country, chiefly agricultural, by variations in the amount and distribution of rainfall from year to year.

Obstacles to the success of the scheme.

On the other hand, it cannot be overlooked that there are certain circumstances in this country which tend to prevent or retard the success of a scheme of Agricultural Insurance. The chief amongst these obstacles is the low level of education of the rural population. The idea of insurance, though simple to the cultured classes, is not devoid of elements of complexity and even of suspicion to the uneducated mind absolutely unaccustomed to the consideration and calculation of averages. Another obstacle is the extreme poverty and indebtedness of the agriculturist which, in some cases, may make it difficult for him to spare even a small fraction of the out-turn of his fields for purposes of insurance. Want of foresight and of thrift is another

CSL

retarding factor. But though these obstacles are serious, they need not deter us from introducing the scheme, if it is found to be sound and beneficial.

Obstacles being gradually removed with the march of material and moral progress.

Energetic endeavours are being made on all sides to remove the obstacles referred to above. The spread of education amongst the rural population is advancing by rapid strides. The co-operative movement with its immense possibilities is introducing ideas of average and of long-term monetary contracts amongst a population not by nature devoid of shrewdness and business capacity. Other forces are at work tending to solve the problem of indebtedness and to engender habits of prudence and thrift amongst the masses. The circumstances working against the success of a scheme of Agricultural Insurance which we have enumerated above are not objections to the system itself but obstacles to its spreading rapidly amongst the population. If the scheme is once brought into effect, then, with the gradual improvement in the material, intellectual and moral conditions of the *raiyat* population, its merits and advantages will be recognised and the scheme will ultimately serve its great and beneficent purpose.

No change in remission, suspension and famine relief rules.

It is not intended that the introduction of the scheme of Agricultural Insurance should be accompanied by any change in the existing rules regarding remission and suspension of land revenue under certain conditions. Nor should any change be effected in the rules relating to the constant preparedness of the state for affording relief in seasons of agricultural distress or famine. The principle of the Agricultural Insurance scheme is that the *raiyat* pays something extra to the state treasury in favourable seasons when he can afford to pay this premium and gets back its equivalent in years of agricultural failure when he needs it. This need not interfere in any way with any benefits or support which he now gets under certain circumstances from the state.

Educated *raiyats* should take the lead in making the scheme popular.

Amongst the *raiyat* population there are educated men who can fully understand the aims, objects and conditions of the scheme. They can easily satisfy themselves that the payments which they will have to make as premia for a series of years will all go back to them in the shape of compensation in years of deficient rainfall. If the scheme is to make headway, such enlightened landowners directly interested in the out-turn of crops should take out policies under the scheme after its introduction. They themselves may be in affluent circumstances and may not be in urgent need of protection by insurance. But joining the scheme will not cause any loss to them in the long run while it will benefit the country to a very great extent by popularizing Agricultural Insurance. When some of them get compensation in years of drought, others will see the advantages of the scheme and will join it.

The calculations relating to the Agricultural Insurance scheme are all based on the average number of

GSL

The scheme though one of financial equilibrium requires financial backing.

droughts occurring in a long series of years. Of course, the years of drought do not occur at regular intervals. After the introduction of the scheme, if several years of drought occur in succession, the state will have to advance a large sum. On the other hand, if at the beginning there is a series of favourable years, a considerable accumulation of money in the hands of Government will result. On the whole, after a sufficient number of years, a state of equilibrium will be reached. It is for this reason that the scheme requires to be worked either by the state or by some organization commanding large financial resources. Taking all circumstances into consideration it is best for the state itself to take the initiative. After the state has demonstrated the soundness and practicability of the scheme by actual working, there would be no harm if local bodies or reliable private agencies take up the matter under adequate state supervision and control.

Necessity for correct rainfall statistics.

The scheme put forward in this treatise brings out the very great importance of collecting rainfall statistics for all parts of the country and for preserving them in a suitable form for future use. The value of these statistics in an agricultural country in which most of the crops are directly fed by rain cannot be over-estimated. So far as the Mysore State is concerned, the suggestions made in the third chapter of this work have been approved by Government and steps are being taken for printing in a convenient form all available rainfall statistics in the state.

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More rain-gauge stations desirable.

It is also necessary to increase the number of rain-gauges, as far as possible. This will not only enable us to study local variations more minutely, but will also secure a valuable check on doubtful figures and enable us to apply necessary corrections to figures which become erratic owing to mistakes in observation and tabulation. A little encouragement may induce private individuals to maintain rain-gauges and rain records. Action in this direction will secure a large volume of useful statistics at a nominal cost to the state.

In slow and steady development lie the safety and practicability of the scheme.

Even if a scheme of Agricultural Insurance is introduced at once in any state or province, we can only hope that it will spread gradually and slowly. This circumstance, however, is not altogether a disadvantage. A scheme like this, if it were to be taken up generally or universally by the agricultural population immediately on its introduction, would be one involving the receipt and disbursement of money on such a vast scale as to make all cautious administrative authorities hesitate about its introduction. For example, if the scheme were to be taken up universally by the *raiyats* in the Mysore State, it would involve a receipt of about a crore of rupees every year and might require the disbursement of four or five crores of rupees every fourth or fifth year. Experiments with a scheme involving transactions of such vast magnitude would be risky. But as stated above, we can only hope that the scheme will spread slowly and gradually and in this slowness lie the safety and practicability of trying it as an experimental measure. We may try the scheme at once in all parts of the state without incurring any undue risk. From the very nature of the case this would be a great advantage; for the experiment is likely to give a correct indication of the value of the scheme if it is carried on simultaneously all over the state rather than in a small selected part of it.

The success of the scheme will have far-reaching results.

The very great importance of Agricultural Insurance in the peculiar conditions of Indian agriculture and of the Indian agriculturist is undeniable. A scheme is here suggested for attaining this object after a close and careful study of all aspects of the subject. It is not a mere theoretical proposition that is here put forward but a concrete scheme with all details and rules regarding practical working. To all those who are interested in the welfare of the agriculturist and in improving his economic condition, an earnest appeal is made to give the scheme a fair trial. Such trial will not be attended with any great risk and will not involve the receipt or expenditure of money on a very large scale. The disbursement will consist of compensation paid to the *raiyat* population in years of drought so that even if there is some loss it will be a case of the *raiyat's* money going back to the *raiyat* when he needs it. Even in the worst case of failure, there will be no loss of the state's money in any real sense of the term. But as far as can be ascertained by careful calculation and study, no such failure or loss need be anticipated. Worked

GSL

and developed cautiously along sound lines, the scheme is bound to prove a success. And the success of this scheme will solve many important problems in Indian administration and in Indian public finance, will have far-reaching effects on the economic condition of the bulk of the population of this vast continent and will constitute a triumph of scientific study and organization in mitigating the disastrous effects of sudden variations in respect of one of the most uncontrollable phenomena of nature.

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APPENDIX I.

TABLES SHOWING ACCEPTED RAINFALL NORMALS FOR ALL TALUKS.

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BANGALORE DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Bangalore	14·51	12·58	12·46	14·17	13·54
Hoskote	11·72	10·32	11·23(*b*)	Not available	11·02
Dodballapur	12·21	12·98	8·93(*b*)	,,	12·59
Nelamangala	13·11	13·03	8·45	7·96(*b*)	13·07
Kankanhalli	14·11	11·96	11·12	5·69(*b*)	13·03
Magadi	13·55	11·85	12·34(*b*)	9·82(*b*)	12·70
Closepet	14·78	12·60	Not available	Not available	13·69
Anekal	16·86	13·20	12·32(*b*)	,,	15·03
Devanhalli	12·87	13·30	9·01(*b*)	,,	13·08
Channapatna ...	14·82	12·22(*b*)	Not available	,,	...

(*a*) Average of the figures of the Central Observatory rain-gauge for

(*b*) Average for less than the full number of years, figures for

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
13·31	13·18	14·03 (38 years)	13·52	Average for 43 years	14·03(*a*)
...	11·09(*b*)	9·98	11·34	Average for 27 years (1870-85 wanting)	*11·34*
...	11·37(*b*)	10·45	11·46	Average for 29 years (1870-82 and 1885 wanting)	10·45
8·21(*b*)	11·53	10·31	10·94	Average for 36 years (1870-76 wanting)	10·31
8·41(*b*)	12·39	11·38	12·18	Average for 31 years (1870-81 wanting)	11·38
11·08(*b*)	12·58(*b*)	11·98	12·16	Average for 39 years (1870, 1877 and 1883-84 wanting)	11·98
...	...	11·55	13·69	Average for 20 years (1870-92 wanting)	11·55
...	14·13(*b*)	13·22	14·33	Average for 27 years (1870-85 wanting)	13·22
...	11·73(*b*)	11·52	12·55	Average for 23 years (1870-89 wanting)	12·55
...	...	12·42	13·59	Average for 19 years (1870-92 and 1895 wanting)	12·42

the longest period available, *i.e.*, 38 years has been accepted in this case.
some years not being available.

BANGALORE DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Bangalore	35·06	30·95	29·47	33·50	33·00
Hoskote	30·65	25·38	25·65(*b*)	Not available	28·01
Dodballapur	29·10	30·30	21·38(*b*)	,,	29·70
Nelamangala	30·07	31·44	21·06	24·04(*b*)	30·75
Kankanhalli	30·64	29·01	26·62	12·22(*b*)	29·82
Magadi	33·44	32·11	25·19(*b*)	20·71	32·72
Closepet	34·78	32·30	Not available	Not available	33·54
Anekal	36·91	31·73	26·90(*b*)	,,	34·32
Devanhalli	29·87	27·57	20·91(*b*)	,,	28·72
Channapatna ...	32·51	30·12(*b*)	Not available	,,	31·32(*b*)

(*a*) Average of the figures of the Central Observatory rain-gauge for

(*b*) Average for less than the full number of years, figures for

TRICT RAINFALL.

JANUARY TO OCTOBER.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
31·49	31·83	33·97 (38 years)	32·39	Average for 43 years	33·97(*a*)
...	27·23(*b*)	24·67	27·66	Average for 27 years (1870-85 wanting)	27·66
...	26·93(*b*)	26·40	27·12	Average for 29 years (1870-82 and 1885 wanting)	26·40
22·55(*b*)	27·52	25·33	26·94	Average for 36 years (1870-76 wanting)	25·33
19·42(*b*)	28·76	26·58	28·22	Average for 31 years (1870-81 wanting)	26·58
22·95(*b*)	30·25(*b*)	29·44	28·03	Average for 40 years (1870 and 1883-84 wanting)	29·44
...	...	28·32	33·54	Average for 20 years (1870-92 wanting)	28·32
...	31·85(*b*)	31·45	32·20	Average for 28 years (1870-84 wanting)	31·45
..	26·12(*b*)	25·33	27·70	Average for 23 years (1870-89 wanting)	25·33
...	...	32·41	31·38	Average for 19 years (1870-92 and 1895 wanting)	32·41

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the longest period available, *i.e.*. 38 years has been accepted in this case.

some years not being available.

KOLAR DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Kolar	10·26	10·80	11·03	9·99	10·53
Bowringpet	10·29	11·35	Not available	Not available	10·82
Chintamani	10·32	11·57	8·40	7·64	10·94
Mulbagal	9·87	10·90	Not available	Not available	10·38
Sidlaghatta	11·45	10·94	9·84	8·01	11·19
Chikballapur ...	12·86	12·07	8·94	12·58	12·46
Bagepalli	9·63	8·06	Not available	Not available	8·84
Goribidnur	10·85	9·64	7 70	,,	10·24
Malur	12·15	10·65	Not available	,,	11·40
Srinivasapur ...	11·42	10·25	8·87(b)	,,	10·83
Gudibanda	12·95	11·22	10·25(b)	,,	12·08

(b) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
10·51	10·69	10·37	11·30	Average for 43 years	10·37
...	...	9·49	10·82	Average for 20 years (1870-92 wanting)	*10·82*
8·02	10·09	9·33	9·40	Average for 41 years (1870-71 wanting)	9·33
...	...	10·26	10·38	Average for 20 years (1870-92 wanting)	*10·38*
8·92	10·74	10·42	10·05	Average for 41 years (1870-71 wanting)	10·42
10·76	11·29	11·86	11·59	Average for 42 years (1872 wanting)	11·86
...	...	7·21	8·84	Average for 20 years (1870-92 wanting)	*8·84*
...	9·39	8·76	9·39	Average for 30 years (1870-82 wanting)	*9·39*
...	...	10·55	11·40	Average for 20 years (1870-92 wanting)	10·55
...	...	9·87	10·27	Average for 28 years (1870-84 wanting)	9·87
...	...	11·31	11·56	Average for 28 years (1870-83 and 1886 wanting)	11·31

figures for some years not being available.

KOLAR DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Kolar	24·67	24·05	25·73	23·98	24.36
Bowringpet	26·03	26·73	Not available	Not available	26·38
Chintamani	23·11	25·97	21·96	24·57	24·54
Mulbagal	26·18	26·23	Not available	Not available	26·20
Sidlaghatta	27·27	26·32	22·69	18·62	26·79
Chikballapur ...	26·64	30·15	24·17	30·84	28·39
Bagepalli	22·94	21·22	Not available	Not available	22·08
Goribidnur	25·86	23·81	20·59	,,	24·83
Malur	27·83	26·58	Not available	,,	27·20
Srinivasapur	25·90	24·52	22·38(*b*)	,,	25·21
Gudibanda	29·84	27·33	24·50(*b*)	,,	28·58

(*b*) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO OCTOBER.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
24·85	24·81	24·43	25·88	Average for 43 years	24·43
...	...	24·97	26·38	Average for 20 years (1870-92 wanting)	*26·38*
23·26	23·68	22·90	23·73	Average for 41 years (1870-71 wanting)	22·90
...	...	25·30	26·20	Average for 20 years (1870-92 wanting)	*26·20*
20·65	25·42	25·21	23·93	Average for 41 years (1870-71 wanting)	*23·93*
27·50	26·98	28·36	27·78	Average for 42 years (1872 wanting)	28·36
...	...	18·48	22·08	Average for 20 years (1870-92 wanting)	*22·08*
...	23·42	23·13	23·42	Average for 30 years (1870-82 wanting)	*23·42*
...	...	26·10	27·20	Average for 20 years (1870-92 wanting)	26·10
...	...	24·58	24·10	Average for 28 years (1870-84 wanting)	24·58
...	...	26·87	27·42	Average for 28 years (1870-83 and 1886 wanting)	26·87

figures for some years not being available.

CSL

TUMKUR DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Tumkur	13·11	14·18	14·32	13·42	13·64
Maddagiri	10·07	9·28	10·57	Not available	9·67
Chiknayakanhalli ...	10·67	11·94	10·68	4·79(*b*)	11·30
Sira	8·47	9·66	Not available	Not available	9·06
Gubbi	12·75	9·86	11·53	9·34	11·30
Tiptur	9·88	9·51	9·53	8·21(*b*)	9·69
Pavagada	7·70	6·46	7·14	8·24	7·08
Kunigal	11·03	10·72	11·38	11·37(*b*)	10·87
Koratagere	11·48	8·33	10·11(*b*)	Not available	9·90
Turuvekere	10·96	9·72	8·53	,,	10·34

(*b*) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
13·87	13·87	13·91	13·78	Average for 42 years (1870 wanting)	13·91
...	9·97	8·26	9·97	Average for 30 years (1870-82 wanting)	*9·97*
7·74(*b*)	11·09	10·02	10·36	Average for 34 years (1870-78 wanting)	10·02
...	...	9·06	9·06	Average for 20 years (1870-92 wanting)	9·06
10·44	11·38	11·48	10·75	Average for 43 years	*10·75*
8·87(*b*)	9·64	9·46	9·55	Average for 32 years (1870-80 wanting)	9·46
7·69	7·10	6·87	7·23	Average for 43 years	*7·23*
11·38(*b*)	11·04	11·07	11·10	Average for 37 years (1870-75 wanting)	11·07
...	9·97(*b*)	8·80	9·94	Average for 24 years (1870-88 wanting)	8·80
...	9·74	9·71	9·74	Average for 30 years (1870-82 wanting)	9·71

figures for some years not being available.

TUMKUR DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Tumkur	32·36	35·69	32·77	29·61	34·02
Maddagiri	24·94	25·12	21 64	Not available	25·03
Chiknayakanhalli ...	24·70	26·56	25·62	12·05(*b*)	25·63
Sira	20·86	21·97	Not available	Not available	21·41
Gubbi	27·87	25·96	27·71	20·86	26·91
Tiptur	22·52	23·66	22·53	20·34(*b*)	23·09
Pavagada	18·28	19·69	15·84	20·78	18·98
Kunigal	27·87	31·85	29·20	26·87(*b*)	29·86
Koratagere	24·44	21·94	19·98(*b*)	Not available	23·19
Turuvekere	24·03	26·55	21·45	,,	25·29

(*b*) Average for less than the full number of years.

TRICT RAINFALL.

JANUARY TO OCTOBER.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
31·19	33·60	33·68	32·27	Average for 42 years (1870 wanting)	*32·27*
...	23·90	20·55	23·90	Average for 30 years (1870-82 wanting)	*23·90*
18·83(*b*)	25·62	22·56	24·03	Average for 34 years (1870-78 wanting)	22·56
...	...	21·47	21·42	Average for 20 years (1870-92 wanting)	*21·42*
24·28	27·18	27·78	25·32	Average for 43 years	*25.32*
21·43(*b*)	22·90	23·50	22·74	Average for 32 years (1870-80 wanting)	23·50
18·31	17·97	17·18	18·53	Average for 43 years	*18.53*
28·03(*b*)	29·64	28·52	29·12	Average for 37 years (1870-75 wanting)	*29·64*
...	22·12(*b*)	21·25	22·65	Average for 24 years (1870-88 wanting)	21·25
...	24·01	23·71	24·01	Average for 30 years (1870-82 wanting)	23·71

figures for some years not being available.

CSL

MYSORE DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Mysore	16·33	12·69	14·04	12·91	14·51
Chamarajnagar ...	12·27	20·87	8·63	Not available	16·07
Seringapatam ...	13·10	11·84	11·04	10·99	12·47
Hunsur	16·90	14·91	15·59	13·79	15·90
Yedatore	12·19	11·37	12·21	10·30	11·78
Heggaddevankote ...	22·32	19·92	12·64	Not available	21·12
Gundlupet	13·09	10·58	11·01	11·46(*b*)	11·83
Nanjangud	14·30	13·04	10·69	Not available	13·67
T.-Narsipur	13·25	10·51	12·25	8·20(*b*)	11.88
Malavalli	11·61	10·22	7·76(*b*)	7·47(*b*)	10·91
Mandya	12·49	9·80	9·89	Not available	11·14
Krishnarajpete ...	14.41	11·07	11·66	10·99(*b*)	12·74
Nagamangala ...	10·15	10·41	9·56	7·99(*b*)	10·28

(*b*) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
13·47	14·35	13·98	13.68	Average for 43 years	*13·68*
...	13.92	9·89	13.92	Average for 30 years (1870-82 wanting)	*13·92*
11 01	11.99	11·80	11·83	Average for 41 years (1870-71 wanting)	11·80
14·69	15·80	15·48	15·57	Average for 42 years (1870 wanting)	15·48
11·25	11·92	11.82	11·02	Average for 43 years	*11·02*
...	18.29	16·08	18·29	Average for 30 years (1870-82 wanting)	*18·29*
11·23(*b*)	11·56	11.41	11·54	Average for 36 years (1870-76 wanting)	11·41
...	12·67	12·29	12·67	Average for 30 years (1870-82 wanting)	*12·67*
10·22(*b*)	12·00	11·83	11·31	Average for 42 years (1874 wanting)	11·83
7·61(*b*)	9·86(*b*)	9.67	9·41	Average for 40 years (1875 and 1884-85 wanting)	9·67
...	10·72	10·59	10 72	Average for 30 years (1870-82 wanting)	*10·72*
11 33(*b*)	12·38	12·45	11·74	Average for 41 years (1870 and 1876 wanting)	*11·74*
8·77(*b*)	10·04	9·41	9·61	Average for 38 years (1870-73 and 1876 wanting)	9·41

figures for some years not being available.

CSL

MYSORE DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Mysore	29·59	29·05	29·75	26·59	29·32
Chamarajnagar ...	26·20	25·92	17·64	Not available	26·06
Seringapatam ...	25·24	26·51	23·72	23·72	25·87
Hunsur	29·71	29·04	27·51	25·52	29·37
Yedatore	24·46	23·68	24·27	19·16	24·07
Heggaddevankote ...	34·89	34·69	22·66	Not available	34·79
Gundlupet	24·61	20·96	19 53	22·62(*b*)	22·78
Nanjangud	25·80	26·80	21·84	Not available	26·30
T.-Narsipur	28·13	22·11	25·25	21·72(*b*)	25·12
Malavalli	26·57	25·18	20·69(*b*)	18·20(*b*)	25·87
Mandya	26·19	24·81	26·00	Not available	25·50
Krishnarajpete ...	27·80	27·18	23·83	21·68(*b*)	27.49
Nagamangala ...	24·03	27·52	23·80	24·64(*b*)	25·77

(*b*) Average for less than the full number of years.

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TRICT RAINFALL.

JANUARY TO OCTOBER.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
28·17	29·46	28·80 (19 years)	28·04	Average for 43 years	*28·04*
...	23·25	21·27	23·25	Average for 30 years (1870-82 wanting)	*23·25*
23·72	25·15	24·94	24·85	Average for 41 years (1870-71 wanting)	24·94
26·51	28·75	28·67	28·16	Average for 42 years (1870 wanting)	28·67
21·71	24·13	23·65	21·90	Average for 43 years	*21·90*
...	30·74	27·20	30·74	Average for 30 years (1870-82 wanting)	*30·74*
21·07(*b*)	21·70	21·57	21·85	Average for 36 years (1870-76 wanting)	21·57
...	24·81	24·17	24.81	Average for 30 years (1870-82 wanting)	*24·81*
23·48(*b*)	25·16	25·75	24·42	Average for 42 years (1874 wanting)	25·75
19·44(*b*)	24·14(*b*)	24·23	22·90	Average for 40 years (1875 and 1884-85 wanting)	24·23
...	25·66	26·00	25·66	Average for 30 years (1870-82 wanting)	*25·66*
25·50(*b*)	26·27	23·66	24·47	Average for 41 years (1870 and 1876 wanting)	*24·47*
24·22(*b*)	25·11	24·35	25·01	Average for 38 years (1870-73 and 1876 wanting)	24·35

figures for some years not being available.

HASSAN DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Hassan	16·96	16·77	16·59	15·51	16·86
Manjarabad	58·42	56·90	49·74(*b*)	Not available	57·66
Arkalgud	21·53	17·10	14·66(*b*)	,,	19·31
Belur	24·81	22·49	15·72(*b*)	,,	23·65
Channarayapatna ..	12·29	11·29	8·95(*b*)	,,	11·79
Arsikere	11·59	10·37	10·42(*b*)	,,	10·98
Hole-Narasipur ...	15·72	11·39	11·23(*b*)	,,	13·55
Alur	26·81	Not available	Not available	,,	...

AGGREGATE RAINFALL FROM

Hassan	32·66	31·81	30·65	24·73	32·23
Manjarabad	87·46	87·78	75·41(*b*)	Not available	87·62
Arkalgud	35·49	30·53	25·20(*b*)	,,	33·01
Belur	38·46	38·36	26·36(*b*)	,,	38·41
Channarayapatna ...	25·34	23·17	18·01(*b*)	,,	24·25
Arsikere	24·67	23·08	21·68(*b*)	,,	23·87
Hole-Narsipur ...	27·68	24·12	22·77(*b*)	,,	25·90
Alur	42·90	Not available	Not available	,,	..

(*b*) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
16·05	16·77	17·12 (20 years)	16·59	Average for 42 years (1870 wanting)	*16·59*
...	55·02(*b*)	55·09	55·61	Average for 27 years (1870-85 wanting)	55·09
...	17·76(*b*)	16·48	18·10	,,	16·48
...	21·00(*b*)	18·97	21·59	,,	*21·59*
...	10·84(*b*)	10·16	11·05	,,	10·16
...	10·79(*b*)	9·77	10·83	,,	9·77
...	12·78(*b*)	12·18	12·95	,,	12·18
...	...	24·14 (17 years)	26·81	Average for 10 years (1870-1902 wanting)	24·14

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27·69	31·70	32·66 (20 years)	29·69	Average for 42 years (1870 wanting)	*29·69*
...	83·55(*b*)	83·91	84·46	Average for 27 years (1870-85 wanting)	83·91
...	30·40(*b*)	27·53	30·99	,,	27·53
...	34·30(*b*)	31·79	35·29	,,	*35·29*
...	22·17(*b*)	21·12	22·86	,,	21·12
...	23·14(*b*)	22·75	23·31	,,	22·75
...	24·85(*b*)	24·05	25·09	,,	24·05
...	...	40·46 (17 years)	42·90	Average for 10 years (1870-1902 wanting)	40·46

figures for some years not being available.

SHIMOGA DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Shimoga	18·87	20·20	19·65	19·15	19·53
Channagiri	13·92	12·72	12·10	14·14	13·32
Honnali	10·65	11·88	10·88	13·34	11·26
Shikaripur	20·62	19·93	18·65	16·88	20·27
Sorab	38·91	38·95	39·16	31·45	38·93
Sagar	52·29	52·80	46·3(*b*)	Not available	52·54
Nagar	133·40	128·37	127·91	152·25(*b*)	130·88
Tirthahalli	80·15	77·91	71·07	68·35	79·03
Kumsi	24·03	23·03	21·29	Not available	23·53

(*b*) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1893-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
19·40	19·57	19·59	19·48	Average for 43 years	*19·48*
13·12	12·91	13·32	13·22	Average for 40 years (1870-72 wanting)	13·32
12·11	11·13	11·75	11·84	Average for 43 years	*11·84*
17.76	19·73	18·61	19·02	Average for 40 years (1870-72 wanting)	18·61
35·30	39·00	36·79	37·12	,,	36·79
...	50·47(*b*)	49·45	51·12	Average for 28 years (1870-84 wanting)	49·45
140·07(*b*)	129·89	125·96	123·34	Average for 39 years (1876-79 wanting).	125·96
69·71	76·37	74·89	74·15	Average for 43 years	*74·15*
...	22·78	23·63	22·78	Average for 30 years (1870-82 wanting)	23·63

figures for some years not being available.

SHIMOGA DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Shimoga	31·50	35·84	34·42	31·90	33·67
Channagiri	27·63	26·86	23·45	24·75	26·99
Honnali	20·40	21·97	20·24	22·71	21·19
Shikaripur	33·96	34·96	33·10	26·43	34·46
Sorab	59·25	62·57	62·40	48 63	60·91
Sagar	79·12	82·11	71·90(*b*)	Not available	80 61
Nagar	199·22	195·73	197·76	206·93(*b*)	197·47
Tirthahalli	120·05	118·52	113·01	106·46	119·28
Kumsi	39·23	39·29	36·26	Not available	39·26

(*b*) Average for less than the full number of years

TRICT RAINFALL.

JANUARY TO OCTOBER.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
33·16	33·92	33·10	33·40	Average for 43 years	*33·40*
24·10	25·81	25·15	25·55	Average for 40 years (1870-72 wanting)	25·51
21·47	20·87	21·32	21·28	Average for 43 years	*21·28*
29·76	34·00	31·37	32·11	Average for 40 years (1870-72 wanting)	31·37
55·51	61·40	57·47	58·21	,,	57·47
...	77·71(*b*)	74·70	78·13	Average for 28 years (1870-84 wanting)	74·70
202·34(*b*)	197·57	190·74	183·81	Average for 39 years (1876-79 wanting)	190·74
109·73	117·19	117·04	113·75	Average for 43 years	*113·75*
...	38·26	38·19	38·26	Average for 30 years (1870-82 wanting)	38·19

figures for some years not being available.

CSL

KADUR DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Chikmagalur	22·76	19·84	17·50	19·62	21·30
Kadur	10·96	10·08	9·00	Not available	10·52
Tarikere	18·93	18·65	15·32	16·76(*b*)	18·79
Koppa	75·29	75·14	75·90	82·38(*b*)	75·21
Mudgere	61·35	62·12	58·72	84·67(*b*)	61·73
Narasimharajapura (Yedahalli)	44·96	36·02	34·82(*b*)	Not available	40·49
Sringeri	90·92	Not available	Not available	,,	...

AGGREGATE RAINFALL FROM

Chikmagalur	35·48	32·94	33·51	32·40	34·21
Kadur	20·49	20·12	18·46	Not available	20·30
Tarikere	33·05	33·79	29·04	26·19(*b*)	33·42
Koppa	114·75	117·63	119·01	120·72(*b*)	116·19
Mudgere	91·96	99·03	96·90	119·69(*b*)	95·49
Narasimharajapura (Yedahalli)	69·62	60·68	55·87(*b*)	Not available	65·15
Sringeri	138·35	Not available	Not available	,,	...

(*b*) Average for less than the full number of years.

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
18·56	20·03	20·03	19·79	Average for 43 years	*19·79*
...	10·01	9·79	10·01	Average for 30 years (1870-82 wanting)	9·79
16·04(*b*)	17·63	15·96	17·56	Average for 33 years (1870-79 wanting)	15·96
79·14(*b*)	75·44	74·23	75·88	Average for 32 years (1870-80 wanting)	74·23
71·70(*b*)	60·73	59·78	62·91	Average for 33 years (1870-79 wanting)	59·78
...	38·60(*b*)	36·76	39·54	Average for 24 years (1870-88 wanting)	36·76
...	...	93·38 (16 years)	90·92	Average for 10 years (1870-1902 wanting)	93·38

JANUARY TO OCTOBER.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
32·95	33·97	33·56	33·34	Average for 43 years	*33·34*
...	19·69	19·27	19·69	Average for 30 years (1870-82 wanting)	19·27
27·63(*b*)	31·96	28·91	31·44	Average for 33 years (1870-79 wanting)	28·91
119·87(*b*)	117·13	116·54	117·36	Average for 32 years (1870-80 wanting)	116·54
108·30(*b*)	95·96	95·36	98·13	Average for 33 years (1870-79 wanting)	95·36
...	93·09(*b*)	59·21	63·61	Average for 24 years (1870-88 wanting)	59·21
...	...	140·81 (16 years)	138·35	Average for 10 years (1870-1902 wanting)	140·81

figures for some years not being available.

CSL

CHITALDRUG DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Chitaldrug	10·93	11·07	9·15	11·38	11·00
Challakere	5·92	8·77	6·57	7·08	7·35
Hiriyur	10·05	8·19	6·06(*b*)	7·74(*b*)	9·12
Holalkere	10·65	11·39	9·75	9·93(*b*)	11·02
Davangere	10·13	12·35	8·82	7·73(*b*)	11·24
Molakalmuru ...	8·74	12·66	7·54(*b*)	Not available	10·70
Jagalur	8·72	10·06	6·42(*b*)	8·65	9·39
Hosadurga	11·82	9·59	7·45	Not available	10·70
Harihar	8·80	9·39	9·49(*b*)	,,	9·10

(*b*) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO JULY.

Average of 20 years 1873-1892 $\frac{4+5}{2}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
10·27	10·38	11·09 (20 years)	10·69	Average for 43 years	*10·69*
6·83	7·09	6·77	7·09	Average for 40 years (1870-72 wanting)	6·77
6·90(*b*)	8·10(*b*)	7·78	8·07	Average for 38 years (1870-73 and 1883 wanting)	7·78
9·84(*b*)	10·60	10·11	10·44	Average for 39 years (1870-73 wanting)	10·11
8·28(*b*)	10·43	9·45	9·98	Average for 36 years (1870-74 and 1877-78 wanting)	9·45
...	9·65(*b*)	7·30	9·88	Average for 27 years (1870-85 wanting)	7·30
7·54(*b*)	8·40(*b*)	7·83	8·35	Average for 41 years (1883-84 wanting)	7·83
...	9·62	10·08	9·62	Average for 30 years (1870-82 wanting)	10·08
...	9·22(*b*)	9·08 (20 years)	9·11	Average for 21 years (1870-91 wanting)	9·08

figures for some years not being available.

CSL

CHITALDRUG DIS-

AGGREGATE RAINFALL FROM

Name of station	Average of 10 years 1903-1912	Average of 10 years 1893-1902	Average of 10 years 1883-1892	Average of 10 years 1873-1882	Average of 20 years 1893-1912 $\frac{2+3}{2}$
1	2	3	4	5	6
Chitaldrug	24·04	22·23	20·39	22·78	23·14
Challakere	15·30	17·35	14·72	15·90	16·04
Hiriyur	20·21	18·19	12·41(*b*)	16·57(*b*)	19·20
Holalkere	22·87	22·65	21·50	18·26(*b*)	22·76
Davangere	23·41	24·81	19·29	15·93(*b*)	24·11
Molakalmuru ...	22·63	22·67	16·81(*b*)	Not available	22·65
Jagalur	20·50	20·79	15·22(*b*)	18·42	20·65
Hosadurga	23·08	19·08	17·34	Not available	21·08
Harihar	19·72	19·57	19·91(*b*)	,,	19·65

(*b*) Average for less than the full number of years,

TRICT RAINFALL.

JANUARY TO OCTOBER.

Average of 20 years 1873-1892 $\frac{4+5}{3}$	Average of 30 years 1883-1912 $\frac{2+3+4}{3}$	Average for 43 years ending 1912 or longest period as per Meteorological Department table	Average for 43 years ending 1912 or longest period available as per calculation	Particulars of period taken in column 10	Average accepted
7	8	9	10	11	12
21·59	22·22	23·16 (20 years)	22·51	Average for 43 years	*22·51*
15·31	15·79	15·27	15·82	Average for 40 years (1870-72 wanting)	15·27
14·49(*b*)	16·94(*b*)	16·71	16·97	Average for 38 years (1870-73 and 1883 wanting)	16·71
19·88(*b*)	22·34	22·01	21·46	Average for 39 years (1870-73 wanting)	22·01
17·76(*b*)	22·50	20·75	21·41	Average for 36 years (1870-74 and 1877-78 wanting)	20·75
...	20·70(*b*)	20·28	21·14	Average for 27 years (1870-85 wanting)	20·28
16·82(*b*)	18·38(*b*)	17·31	18·71	Average for 41 years (1883-84 wanting)	*18·71*
...	19·83	19·86	19·83	Average for 30 years (1870-82 wanting)	19·86
...	19·73(*b*)	19·64 (20 years)	19·65	Average for 21 years (1870-91 wanting)	19·64

figures for some years not being available.

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APPENDIX II.

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BANGALORE

BANGALORE

January to July—

Accepted average	14·03
50 % of average	7·02
65 % of average	9·12
75 % of average	10·53

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	15·02	...	...	...
1871	14·00	...	...	...
1872	15·04	...	...	...
1873	4·06	F1	F1	F1
1874	24·50	...	...	...
1875	12·68	...	...	...
1876	10·32	...	...	F1
1877	10·42	...	...	F1
1878	14·87	...	...	...
1879	21·87	...	...	...
1880	23·18	...	...	...
1881	6·90	F1	F1	F1
1882	12·91	...	...	...
1883	8·66	...	F1	F1
1884	6·53	F1	F1	F1
1885	15·55	...	...	...
1886	18·67	...	...	...
1887	9·29	...	...	F1
1888	11·35	...	...	...
1889	12·15	...	...	...
1890	15·63	...	...	...
1891	13·65	...	...	...
1892	13·13	...	...	...
1893	18·61	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	33·97
50 % of average	16·99
65 % of average	22·08
75 % of average	25·49

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
38·52	...	...	...	 1870
27·37	...	...	...	 1871
36·81	...	...	...	 1872
28·94	...	...	...	 1873
55·38	...	...	...	 1874
21·56	...	F2	F2	 1875
16·77	F2	F2	F2	 1876
34·87	...	...	...	 1877
39·98	...	...	...	 1878
38·54	...	...	...	 1879
48·65	...	...	...	 1880
23·20	...	...	F2	 1881
27·16	...	...	...	 1882
29·93	...	...	...	 1883
19·26	...	F2	F2	 1884
37·06	...	...	...	 1885
37·57	...	...	...	 1886
29·06	...	...	...	 1887
22·15	...	...	F2	 1888
35·47	...	...	...	 1889
34·36	...	...	...	 1890
23·78	...	...	F2	 1891
26·10	...	...	...	 1892
35·65	...	...	...	 1893

BANGALORE

BANGALORE

January to July—

Accepted average	14·03
50 % of average	7·02
65 % of average	9·12
75 % of average	10·53

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	16·94	...	...	...
1895	12·31	...	...	...
1896	9·43	...	...	F1
1897	12·54	...	..	...
1898	7·65	...	F1	F1
1899	9·18	...	...	F1
1900	13·73	...	...	...
1901	14·52	...	...	...
1902	10·98	...	...	...
1903	7·90	...	F1	F1
1904	17·93	...	...	...
1905	11·87	...	...	...
1906	13·23	...	...	...
1907	21·01	...	...	..
1908	17·37	...	...	...
1909	15·52	...	...	...
1910	14·09	...	..	...
1911	15·05	...	...	..
1912	11·16	...	...	...

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	33·97
50 % of average	16·99
65 % of average	22·08
75 % of average	25·49

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
29·38	...	...	...	 1894
33·62	...	...	...	 1895
22·64	..	...	F2	 1896
41·32	...	...	...	 1897
25·39	...	...	F2	 1898
25·18	...	...	F2	 1899
30·56	...	...	...	 1900
34·62	...	...	...	 1901
31·18	...	...	...	 1902
40·79	...	...	...	 1903
31 20	...	...	...	 1904
33·79	...	...	...	 1905
38·07	...	...	...	 1906
30·00	...	...	...	 1907
25·56	...	...	...	 1908
39·14	...	...	...	 1909
41·12	...	...	...	 1910
29·33	...	...	...	 1911
41·68	...	...	...	 1912

BANGALORE

HOSKOTE

January to July—

Accepted average	...	...	...	... 11·34
50 % of average	...	...	...	... 5·67
65 % of average	...	...	...	... 7·37
75 % of average	...	...	...	... 8·51

Year			Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	...	...	15·83	...	...	...
1887	...	...	9·73	...	...	...
1888	...	...	6·43	...	F1	F1
1889	...	...	9·99	...	...	...
1890	...	...	8·60	...	...	...
1891	...	...	15·92	...	...	...
1892	...	...	12·13	...	...	...
1893	...	...	14·22	..	...	...
1894	...	...	9·70	...	...	...
1895	...	...	11·25	...	...	...
1896	...	...	12·82	...	...	...
1897	...	...	9·57	...	...	..
1898	...	...	5·91	...	F1	F1
1899	...	...	8·76	...	...	...
1900	...	...	7·36	...	F1	F1
1901	...	...	14·22	...	...	...
1902	...	...	9·41	...	...	...
1903	...	...	11·99	...	...	...
1904	...	...	15·68	...	..	..
1905	...	...	11·63	...	...	...
1906	...	...	10·20	...	...	..
1907	...	...	16·08	...	...	...
1908	...	...	15·05		...	...
1909	...	...	12·67	...	...	..

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DISTRICT.

TALUK.

January to October—

Accepted average	27·66
50 % of average	13·83
65 % of average	17·98
75 % of average	20·75

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
31·19	...	...	...	 1886
26·19	...	...	...	 1887
22·45	...	...	...	 1888
33·25	...	...	...	 1889
19·90	...	...	F2	 1890
23·78	...	...	...	 1891
22·83	...	...	...	 1892
21·88	...	...	...	 1893
23·42	...	...	...	 1894
27·26	...	...	...	 1895
19·95	...	...	F2	 1896
32·34	...	...	...	 1897
20·06	...	...	F2	 1898
27·16	...	...	...	 1899
21·24	...	...	...	 1900
35·18	...	...	...	 1901
25·28	...	...	...	 1902
30·34	...	...	...	 1903
37·36	...	...	...	 1904
26·40	...	...	...	 1905
39·46	...	...	...	 1906
23·76	...	...	...	 1907
21·01	...	...	...	 1908
38·44	...	...	...	 1909

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BANGALORE

HOSKOTE

January to July—

Accepted average	11·34
50 % of average	5·67
65 % of average	7·37
75 % of average	8·51

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1910	11·18	...	...	...
1911	11·38	...	...	...
1912	8·38	...	...	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	27·66
50 % of average	13·83
65 % of average	17·98
75 % of average	20·75

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
32·87	...	...	...	 1910
22·31	...	...	...	 1911
35·60	...	...	...	 1612

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BANGALORE

DODBALLAPUR

January to July—

Accepted average	10.45
50 % of average	5·23
65 % of average	6·79
75 % of average	7·85

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	4·48	F1	F1	F1
1884	6·10	...	F1	F1
885	Not available			
1886	14·99	...	...	..
1887	16·27	...	...	...
1888	2·57	F1	F1	F1
1889	7·94	...	...	...
1890	7·85	...	...	...
1891	4·25	F1	F1	F1
1892	15·99	...	...	...
1893	16·72	...	...	...
1894	14·45	...	...	...
1895	12·97	...	...	...
1896	11·90	...	...	...
1897	11·64	...	...	...
1898	14·24	...	...	...
1899	11·89	...	...	...
1900	7·50	...	...	F1
1901	17·35	...	...	...
1902	11·19	...	...	...
1903	10·42	...	...	...
1904	10·43	...	...	...
1905	12·73	...	...	...
1906	9·29	..	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	26·40
50 % of average	13·20
65 % of average	17·16
75 % of average	19·80

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
11·90	F2	F2	F2	 1883
12·75	F2	F2	F2	 1884
Not available				 1885
29·62	...	...	...	 1886
26·12	...	...	...	 1887
15·88	...	F2	F2	 1888
30·20	...	...	...	 1889
21·84	...	...	...	 1890
12·30	F2	F2	F2	 1891
31·85	...	...	...	 1892
33·57	...	...	...	 1893
33·79	...	...	...	 1894
25·11	...	...	...	 1895
26·89	...	...	...	 1896
36·02	...	...	...	 1897
33·55	...	...	...	 1898
28·41	...	...	...	 1899
19·60	...	...	F2	 1900
36·68	...	...	...	 1901
29·96	...	...	...	 1902
42·54	...	...	...	 1903
20·97	...	...	...	 1904
25·02	...	...	...	 1905
33·28	...	...	...	 1906

BANGALORE

DODBALLAPUR

January to July—

Accepted average	10·45
50 % of average	5·23
65 % of average	6·79
75 % of average	7·85

Year	Rainfall Jan. to July	Failures 50 % basis	Failuaes 65 % basis	Failures 75 % basis
1907	11·33	...	...	...
1908	13·25	...	...	...
1909	14·08	...	...	...
1910	17·03	...	...	...
1911	8·75	...	...	...
1912	14·19	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	26·40
50 % of average	13·20
65 % of average	17·16
75 % of average	19·80

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
18·67	...	...	F2	 1907
21·91	...	...	...	 1908
37·57	...	...	...	 1909
38·38	...	...	...	 1910
19·03	...	...	F2	 1911
33·09	...	...	...	 1912

BANGALORE

NELAMANGALA

January to July—

Accepted average	10·31
50 % of average	5·16
65 % of average	6·70
75 % of average	7·74

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1877	3·28	F 1	F 1	F 1
1878	11·01	...	...	...
1879	10·74	...	...	...
1880	9·59	...	...	...
1881	1·10	F 1	F 1	F 1
1882	12·06	...	...	...
1883	8·61	...	...	...
1884	4·60	F 1	F 1	F 1
1885	10·97	...	...	...
1886	8·38	...	...	...
1887	3·78	F 1	F 1	F 1
1888	4·01	F 1	F 1	F 1
1889	9·67	...	...	...
1890	8·15	...	...	...
1891	11·80	...	...	...
1892	15·58	...	...	...
1893	27·07	...	...	...
1894	17·72	...	...	...
1895	11·34	...	...	...
1896	15·08	...	...	...
1897	10·60	...	...	...
1898	11·12	...	...	...
1899	9·36	...	...	...
1900	10·46	...	...	...

CSL

DISTRICT.

TALUK.

January to October—

Accepted average	25·33
50 % of average	12·67
65 % of average	16·46
75 % of average	19·00

Rainfall Jan. to Oct-	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
19·79	...	...	...	 1877
38·41	...	...	...	 1878
22·92	...	...	...	 1879
23·22	...	...	...	 1880
16·35	...	F2	F2	 1881
23·60	...	...	...	 1882
26·51	...	...	...	 1883
13·67	...	F2	F2	 1884
30·96	...	...	...	 1885
14·70	...	F2	F2	 1886
9·45	F2	F2	F2	 1887
14·77	...	F2	F2	 1888
31·52	...	...	...	 1889
20·80	...	...	...	 1890
21·53	...	...	...	 1891
27·68	...	...	...	 1892
44·18	...	...	...	 1893
33·92	...	...	...	 1894
34·42	...	...	...	 1895
32·18	...	...	...	 1896
36·61	...	...	...	 1897
26·53	...	...	...	 1898
29·08	...	...	...	 1899
29·16	...	...	...	 1900

CSL

BANGALORE

NELAMANGALA

January to July—

Accepted average	10·31
50 % of average	5·16
65 % of average	6·70
75 % of average	7·74

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65% basis	Failures 75 % basis
1901	9·56	...	...	...
1902	8·03	...	...	...
1903	10·37	...	...	...
1904	11·69	...	...	...
1905	11·76	...	...	...
1906	10·69	...	...	...
1907	12·31	...	...	...
1908	11·87	...	...	...
1909	14·26	...	...	...
1910	15·19	...	...	...
1911	14·80	...	...	...
1912	15·25	...	...	...

GSL

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	25·33
50 % of average	12·67
65 % of average	16·46
75 % of average	19·00

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
22·29	...	...	...	1901
26·03	...	...	...	1902
37·40	...	...	...	1903
23·75	...	...	...	1904
23·95	...	...	...	1905
37·93	...	...	...	1906
15·29	...	F 2	F 2	1907
20·04	...	...	...	1908
38·76	...	...	...	1909
29·94	...	...	...	1910
25·22	...	...	...	1911
40·48	...	...	...	1912

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BANGALORE

KANKANHALLI

January to July—

Accepted average	11·38
50 % of average	5·69
65 % of average	7·39
75 % of average	8·54

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1882	5·69	...	F1	F1
1883	5·60	F1	F1	F1
1884	5·80	...	F1	F1
1885	6·55	...	F1	F1
1886	20·68	...	...	...
1887	11·23	...	...	...
1888	6·63	...	F1	F1
1889	13·40	...	...	...
1890	13·66	...	...	...
1891	8·72	...	...	...
1892	18·97	...	...	...
1893	20·63	...	...	...
1894	13·31	...	...	...
1895	10·60	...	...	...
1896	7·81	..	...	F1
1897	9·93	...	...	...
1898	8·99	...	...	...
1899	6·06	...	F1	F1
1900	14·67	...	...	...
1901	11·46	...	...	...
1902	16.23	...	...	...
1903	14·33	...	...	...
1904	17·84	...	...	...
1905	15·55	...	...	...

GSL

DISTRICT.

TALUK.

January to October—

Accepted average	26·58
50 % of average	13·29
65 % of average	17·28
75 % of average	19·94

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Remarks
12·22	F 2	F 2	F 2	 1882
21·03	...	...	...	 1883
13·38	...	F 2	F 2	 1884
17·56	...	...	F 2	 1885
41·43	...	...	...	 1886
34·28	...	...	...	 1887
17·85	...	...	F 2	 1888
38·45	...	...	...	 1889
33·38	...	...	...	 1890
15·11	...	F 2	F 2	 1891
33·58	...	...	...	 1892
35·66	...	...	...	 1893
39·37	...	...	...	 1894
30·34	...	...	...	 1895
24·02	...	...	...	 1896
39·73	...	...	...	 1897
22·79	...	...	...	 1898
13·89	...	F 2	F 2	 1899
26·21	...	...	...	 1900
30·03	...	...	...	 1901
28·11	...	...	...	 1902
38·19	...	...	...	 1903
24·07	...	...	...	 1904
24·26	...	...	...	 1905

CSL

BANGALORE

KANKANHALLI

January to July—

Accepted average	11·38
50 % of average	5·69
65 % of average	7·39
75 % of average	8·54

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1906	8·55	...	......	......
1907	14·56	...	......	......
1908	12·08	...	......	......
1909	11·00	...	......	......
1910	16·62	...	......	......
1911	18·36	...	......	......
1912	12·22	...	......	......

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	26·58
50 % of average	13·29
65 % of average	17·28
75 % of average	19·94

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
33·29	...	...	...	 1906
23·05	...	...	...	 1907
19·18	...	...	F 2	 1908
41·03	...	...	...	 1909
36·65	...	...	...	 1910
32·87	...	...	...	 1911
33·70	...	...	...	 1912

BANGALORE

MAGADI

January to July—

Accepted average	11·98
50 % of average	5·99
65 % of average	7·79
75 % of average	8·99

Year	Rainfall Jan to July	Failures 50 % basis	Failures 65% basis	Failures 75% basis
1871	25·00	...	...	...
1872	8·10	...	...	F1
1873	4·35	F1	F1	F1
1874	15·58	...	...	..
1875	7·78	...	F1	F1
1876	9·60	...	...	...
1877	0·00	F1	F1	F1
1878	9·70	...	...	...
1879	19·60	...	...	...
1880	11·05	...	...	...
1881	3·43	F1	F1	F1
1882	6·75	...	F1	F1
1883	Not	available		
1884	Not	available		
1885	8·16	...	...	F1
1886	16·77	...	...	...
1887	8·46	...	...	F1
1888	9·88	...	...	...
1889	13·20	...	...	...
1890	14·89	...	...	...
1891	11·33	...	...	...
1892	16·05	...	...	...
1893	27·52	...	...	...
1894	11·37	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	29·44
50 % of average	14·72
65 % of average	19·14
75 % of average	22·08

Rainfall Jan to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
36·55	...	...	...	 1871
20·46	...	...	F2	 1872
22·15	...	...	...	 1873
30·48	...	...	...	 1874
13·38	F2	F2	F2	 1875
14·62	F2	F2	F2	 1876
7·42	F2	F2	F2	 1877
27·54	...	...	...	 1878
28·35	...	...	...	 1879
26·21	...	...	...	 1880
12·22	F2	F2	F2	 1881
15·19	...	F2	F2	 1882
Not	available			1883
Not	available			1884
20·12	...	...	F2	 1885
24·11	...	...	...	 1886
27·25	...	...	...	 1887
20·76	...	...	F2	 1888
33·78	...	...	...	 1889
27·84	...	...	...	 1890
21·45	...	...	F2	 1891
26·23	...	...	...	 1892
44·77	...	...	...	 1893
30·40	...	...	...	 1894

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BANGALORE

MAGADI

January to July—

Accepted average	11·98
50 % of average	5·99
65 % of average	7·79
75 % of average	8·99

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1895	18·95	...	...	...
1896	11·06	...	...	...
1897	7·99	...	...	F1
1898	11·90	...	...	...
1899	4·60	F1	F1	F1
1900	9·81	...	...	...
1901	10·14	...	...	...
1902	5·17	F1	F1	F1
1903	12·62	...	...	...
1904	12·45	...	...	...
1905	9·75	...	...	...
1906	8·53	...	...	F1
1907	20·90	...	...	...
1908	16·26	...	...	...
1909	10·04	...	...	...
1910	19·40	...	...	...
1911	12·18	...	...	...
1912	13·44	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	29·44
50 % of average	14·72
65 % of average	19·14
75 % of average	22·08

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
40·08	...	...	...	 1895
22·84	...	...	...	 1896
40·45	...	...	...	 1897
31·53	...	...	...	 1898
23·20	...	...	...	 1899
31·36	...	...	...	 1900
31·59	...	...	...	 1901
24·93	...	...	...	 1902
38·99	...	...	...	 1903
27·28	...	...	...	 1904
22·06	...	...	F2	 1905
43·73	...	...	...	 1906
30·69	...	...	...	 1907
31·76	...	...	...	 1908
34·16	...	...	...	 1909
38·48	...	...	...	 1910
25·53	...	...	...	 1911
41·81	...	...	...	 1912

BANGALORE

CLOSEPET

January to July—

Accepted average	11·55
50 % of average	5·78
65 % of average	7·51
75 % of average	8·66

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1893	21·51	...	...	...
1894	18·44	...	...	...
1895	11·50	...	...	...
1896	11·86	...	...	...
1897	9·11	...	...	...
1898	8·14	...	...	F1
1899	7·89	...	...	F1
1900	11·06	...	...	...
1901	13·94	...	...	...
1902	12·63	...	...	...
1903	16·57	...	...	...
1904	14·13	...	...	...
1905	11·69	...	...	...
1906	11·21	...	...	...
1907	18·86	...	...	...
1908	20·33	...	...	...
1909	9·12	...	...	...
1910	14·86	...	...	...
1911	16·14	...	...	...
1912	14·94	...	...	...

DISTRICT.

SUB-TALUK.

January to October—

Accepted average	28·32
50 % of average	14·16
65 % of average	18·41
75 % of average	21·24

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
46·91	...	...	...	 1893
37·43	...	...	...	 1894
34·43	...	...	...	 1895
25·45	..	...	...	 1896
42·08	...	...	...	 1897
25·34	...	...	...	 1898
24·84	...	...	...	 1899
30·84	...	...	...	 1900
30·78	...	...	...	 1901
27·99	...	...	...	 1902
43·11	...	...	...	 1903
24·92	...	...	...	 1904
24·66	...	...	...	 1905
45·12	...	...	...	 1906
31.07	...	...	...	 1907
28·86	...	...	...	 1908
36·74	...	...	...	 1909
36·67	...	...	...	 1910
26·18	...	...	...	 1911
40.54	...	...	...	 1912

BANGALORE

ANEKAL

January to July—

Accepted average	13·22
50 % of average	6·61
65 % of average	8·59
75 % of average	9·92

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1885	0·00	F1	F1	F1
1886	22·06	...	...	...
1887	8·81	...	...	F1
1888	7·32	...	F1	F1
1889	8·31	...	F1	F1
1890	13·64	...	...	...
1891	12·35	...	...	...
1892	13·77	...	...	...
1893	23·29	...	...	...
1894	16·42	...	...	...
1895	13·91	...	...	...
1896	8·41	...	F1	F1
1897	11·61	...	...	...
1898	7·85	...	F1	F1
1899	9·26	...	..	F1
1900	18·64	...	...	...
1901	15·11	...	...	...
1902	7·52	...	F1	F1
1903	15·29	...	...	...
1904	21·17	...	...	...
1905	17·31	...	...	...
1906	14·87	...	...	...
1907	18·96	..	...	...
1908	14·35	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	31·45
50 % of average	15·73
65 % of average	20·44
75 % of average	23·60

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
14·41	F2	F2	F2	 1885
38·82	...	...	...	 1886
25·93	...	...	...	 1887
17·33	...	F2	F2	 1888
32·27	...	...	...	 1889
30·23	...	...	...	 1890
24·43	...	...	...	 1891
31·77	...	...	...	 1892
40·33	...	...	...	 1893
34·73	...	...	...	 1894
39·74	...	...	...	 1895
28·96	...	...	...	 1896
37·71	...	...	...	 1897
22·62	...	...	F2	 1898
26·31	...	...	...	 1899
33·78	...	...	...	 1900
29·05	...	...	...	 1901
24·41	...	...	...	 1902
30·95	...	...	...	 1903
29·51	...	...	...	 1904
30·41	...	...	...	 1905
39·24	...	...	...	 1906
31·17	...	...	...	 1907
26·46	...	...	...	 1908

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BANGALORE

ANEKAL

January to July—

Accepted average	13·22
50 % of average	6·61
65 % of average	8·59
75 % of average	9·92

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1909	14·22	...	...	...
1910	18·92	...	...	...
1911	16·53	...	...	...
1912	17·03	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	31·45
50 % of average	15·73
65 % of average	20·44
75 % of average	23·60

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
48·50	...	...	...	 1909
48·29	...	...	...	 1910
28·38	...	..	...	 1911
46·23	...	...	...	 1912

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BANGALORE

DEVANHALLI

January to July—

Accepted average	12·55
50 % of average	6·28
65 % of average	8·15
75 % of average	9·42

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1890	6·84	...	F1	F1
1891	7·63	...	F1	F1
1892	12·63	..	...	...
1893	22·23	...	...	...
1894	16·52	...	...	...
1895	17·24	...	...	...
1896	11·28	...	...	...
1897	10·13	...	...	...
1898	7·88	..	F1	F1
1899	8·27	...	...	F1
1900	7·74	...	F1	F1
1901	15·61	...	...	...
1902	16·12	...	...	...
1903	11·79	..	...	...
1904	10·57	...	...	...
1905	16·20	...	...	...
1906	10·47	...	...	...
1907	11·83	...	...	...
1908	18·91	...	...	...
1909	11·71	...	...	...
1910	13·83	...	...	...
1911	12·48	...	...	...
1912	16·06	...	...	...

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DISTRICT.

TALUK.

January to October—

Accepted average ... ... 25·33
50 % of average .. .. 12·62
65 % of average ... ... 16·40
75 % of average ... ... 18·93

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
20·30	...	..	...	 1890
14·02	...	F2	F2	 1891
28·46	...	...	...	 1892
37·65	...	...	...	 1893
32·57	...	...	...	 1894
32·32	...	...	...	 1895
23·05	...	...	...	 1896
30·13	...	...	...	 1897
31·45	...	...	...	 1898
22·72	...	..	...	 1899
31·72	...	...	...	 1900
28·20	...	...	...	 1901
31·16	...	...	...	 1902
40·53	...	...	...	 1903
21·12	...	...	..	 1904
30·27	...	...	...	 1905
27·41	...	...	...	 1906
23·17	...	...	...	 1907
26·87	...	...	...	 1908
31·71	...	...	...	 1909
34·80	...	...	...	 1910
28·65	..	...	...	 1911
39·32	...	...	...	 1912

BANGALORE

CHANNAPATNA

January to July—

Accepted average	12·42
50 % of average	6·21
65 % of average	8·07
75 % of average	9·31

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1893	27·49	...	...	..
1894	11·96	...	...	...
1895	Not	available		
1896	10·78	...	...	...
1897	8·08	...	...	F1
1898	10·59	...	...	...
1899	6·64	...	F1	F1
1900	9·84	...	...	...
1901	13·51	...	...	...
1902	11·14	...	...	...
1903	12·52	...	...	...
1904	11·92	..	...	...
1905	12·93	...	...	...
1906	10·79	...	...	...
1907	17·10	...	.	..
1908	21·94	...	...	...
1909	11·85	...	...	...
1910	19·16	..	...	...
1911	15·45	...	...	...
1912	14·55	...	...	..

DISTRICT.

TALUK.

January to October—

Accepted average	32·41
50 % of average	16·21
65 % of average	21·03
75 % of average	24·31

Rainfall Jan. to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
49·32	...	...	...	 1893
33·58	...	...	...	 1894
Not available				 1895
24·00	...	...	F2	 1896
35·67	...	...	...	 1897
34·30	...	...	...	 1898
22·24	...	...	F2	 1899
34·19	...	...	...	 1900
27·82	...	...	...	 1901
27·84	...	...	...	 1902
35·89	...	...	...	 1903
20·76	...	F2	F2	 1904
27·50	...	...	...	 1905
38·58	...	...	...	 1906
26·08	...	...	...	 1907
31·43	...	...	...	 1908
39·93	...	...	...	 1909
36·61	...	...	...	 1910
24·82	...	...	...	 1911
43·52	...	...	...	 1912

KOLAR

KOLAR

January to July—

Accepted average	10·37
50 % of average	5·19
65 % of average	6·74
75 % of average	7·78

Year	Rainfall Jan to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	36·95	...	...	...
1871	19·81	...	...	...
1872	8·37	...	..	...
1873	4·37	F1	F1	F1
1874	12·89	...	...	...
1875	7·44	...	...	F1
1876	9·52	...	...	...
1877	8·06	...	...	...
1878	12·90	...	...	...
1879	14·86	...	...	...
1880	10·04	...	...	...
1881	11·18	...	...	...
1882	8·66	...	...	...
1883	12·04	...	..	...
1884	3·51	F1	F1	F1
1885	7·68	...	...	F1
1886	13·02	...	...	...
1887	10·73	...	...	...
1888	12·12	...	...	...
1889	11·91	...	...	...
1890	16·94	...	...	...
1891	7·20	...	...	F
1892	15·15	...	...	...
1893	15·55	..	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	24·43
50 % of average	12·22
65 % of average	15·88
75 % of average	18·33

Rainfall Jan to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
35·91	...	...	..	 1870
29·03	...	...	...	 1871
13·80	...	F2	F2	 1872
24·21	...	...	...	 1873
36·43	...	...	...	 1874
14·85	...	F2	F2	 1875
11·86	F2	F2	F2	 1876
16·64	...	...	F2	 1877
36·62	...	...	...	 1878
25·91	...	...	...	 1879
25·07	...	...	...	 1880
31·04	..	...	...	 1881
17·23	...	...	F2	 1882
33·45	...	...	...	 1883
17·55	...	...	F2	 1884
19·92	...	...	...	 1885
24·61	...	...	...	 1886
29·02	...	...	...	 1887
23·63	...	...	...	 1888
31·53	...	..	...	 1889
31·16	...	..	...	 1890
14·83	...	F2	F2	 1891
31·63	...	...	...	 1892
24·60	...	...	...	 1893

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KOLAR

KOLAR

January to July—

Accepted average	10·37
50 % of average	5·19
65 % of average	6·74
75 % of average	7·78

Year	Rainfall Jan to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	13·03	...	...	...
1895	7·63	...	...	F1
1896	9·16	...	...	...
1897	10·25	...	...	...
1898	10·04	...	...	...
1899	12·22	...	...	...
1900	13·98	...	...	...
1901	8·42	...	...	...
1902	7·76	...	...	F1
1903	11·71	...	...	...
1904	9·65	...	...	...
1905	3·82	F1	F1	F1
1906	8·30	...	...	...
1907	13·76	...	...	...
1908	9·02	...	...	...
1909	14·20	...	...	...
1910	10·44	...	...	...
1911	12·74	...	...	...
1912	9·03	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·43
50 % of average	12·22
65 % of average	15·88
75 % of average	18·33

Rainfall Jan to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
25·54	...	...	...	 1894
25·78	...	...	...	 1895
21·28	...	...	...	 1896
29·19	...	..	...	 1897
23·33	...	...	...	 1898
26·23	...	...	...	 1899
23·13	...	...	...	 1900
17·76	...	...	F2	 1901
23·67	...	...	...	 1902
33·01	...	...	...	 1903
17·11	...	..	F2	 1904
13·89	...	F2	F2	 1905
31·54	...	...	...	 1906
23·27	...	...	...	 1907
15·73	...	F2	F2	 1908
30·05	...	...	...	 1909
26·39	...	...	...	 1910
19·50	...	..	...	 1911
36·26	...	...	...	 1912

CSL

KOLAR

BOWRINGPET

January to July—

Accepted average	10·82
50 % of average	5·41
65 % of average	7·03
75 % of average	8·11

Year	Rainfall Jan to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1893	16·61	...	...	...
1894	12·60	...	...	...
1895	9·20	...	...	...
1896	6·40	...	F1	F1
1897	9·74	...	...	...
1898	9·85	...	...	...
1899	9·14	...	...	...
1900	16·03	...	...	...
1901	11·76	...	...	...
1902	12·23	...	...	...
1903	13·10	...	...	...
1904	15·49	...	...	...
1905	5·71	...	F1	F1
1906	7·74	...	...	F1
1907	9·10	...	...	...
1908	7·33	...	...	F1
1909	13·74	...	...	...
1910	14·93	...	...	...
1911	9·63	...	...	...
1912	6·21	...	F1	F1

DISTRICT.

TALUK.

January to October—

Accepted average	26·38
50 % of average	13·19
65 % of average	17·15
75 % of average	19·78

Rainfall Jan to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
24·31	...	...	...	 1893
29·30	...	...	...	 1894
29·65	...	...	...	 1895
22·76	...	...	...	 1896
31·58	...	...	...	 1897
26·11	...	...	...	 1898
21·95	...	...	...	 1899
31·70	...	...	...	 1900
19·26	...	...	F2	 1901
30·68	...	...	...	 1902
38·75	...	...	...	 1903
25·23	...	...	...	 1904
17·80	...	...	F2	 1905
27·11	...	...	...	 1906
18·29	...	...	F2	 1907
16·85	...	F2	F2	 1908
34·46	...	...	...	 1909
32·88	...	...	...	 1910
17·76	...	...	F2	 1911
31·25	...	...	...	 1912

KOLAR

CHINTAMANI

January to July—

Accepted average	9·33
50 % of average	4·67
65 % of average	6·06
75 % of average	7·00

Year	Rainfall Jan to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1872	5·95	...	F1	F1
1873	3·20	F1	F1	F1
1874	10·35	...	...	...
1875	7·50	...	...	...
1876	5·80	...	F1	F1
1877	4·30	F1	F1	F1
1878	9·10	...	...	...
1879	14·05	...	...	...
1880	10·93	...	...	...
1881	7·10	...	...	...
1882	4·15	F1	F1	F1
1883	7·73	...	...	...
1884	3·84	F1	F1	F1
1885	9·79	...	...	...
1886	8·55	...	...	...
1887	7·85	...	...	...
1888	6·09	...	...	F1
1889	10·75	...	...	...
1890	7·50	...	...	...
1891	6·10	...	...	F1
1892	15·88	...	...	...
1893	10·25	...	...	...
1894	16·55	...	...	...
1895	11·80	...	...	...

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TALUK.

January to October—

Accepted average	22·90
50 % of average	11·45
65 % of average	14·89
75 % of average	17·18

Rainfall Jan to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
16·75	...	...	F2	 1872
18·05	...	...	...	 1873
48·35	...	...	...	 1874
18·70	...	...	...	 1875
7·80	F2	F2	F2	 1876
26·50	...	...	...	 1877
40·70	...	...	...	 1878
15·55	...	...	F2	 1879
25·33	...	...	...	 1880
27·95	...	...	...	 1881
16·80	...	...	F2	 1882
21·61	...	...	...	 1883
13·13	...	F2	F2	 1884
20·65	...	...	...	 1885
26·31	...	...	...	 1886
24·02	...	...	...	 1887
17·24	...	...	...	 1888
29·05	...	...	...	 1889
20·36	...	...	...	 1890
16·27	...	...	F2	 1891
30·08	...	...	...	 1892
28·20	...	...	...	 1893
31·55	...	...	...	 1894
26·10	...	...	...	 1895

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CHINTAMANI

January to July—

Accepted average	9·33
50 % of average	4·67
65 % of average	6·06
75 % of average	7·00

Year	Rainfall Jan to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1896	9·80	...	...	...
1897	8·12	...	...	...
1898	6·30	...	...	F1
1899	11·14	...	...	...
1900	19·45	...	...	...
1901	10·04	...	...	...
1902	12·02	...	...	...
1903	7·95	...	...	...
1904	8·62	...	...	...
1905	10·10	...	...	...
1906	10·64	...	...	...
1907	14·84	...	...	...
1908	7·74	...	...	...
1909	11·59	...	...	...
1910	13·64	...	...	...
1911	12·14	...	...	...
1912	6·03	...	F1	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	22·90
50 % of average	11·45
65 % of average	14·89
75 % of average	17·18

Rainfall Jan to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·00	...	...	..	 1896
26·24	...	...	...	 1897
15·00	..	...	F2	 1898
24·29	...	...	...	 1899
28·82	...	...	...	 1900
23·90	...	...	...	 1901
32·63	...	...	...	 1902
21·82	...	...	...	 1903
20·64	...	...	...	 1904
22·22	...	...	...	 1905
24·35	...	...	...	 1906
24·35	...	...	...	 1907
12·09	...	F2	F2	 1908
24·41	...	...	...	 1909
32·65	...	...	...	 1910
22·75	...	...	...	 1911
25·89	...	...	...	 1912

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KOLAR

MULBAGAL

January to July—

Accepted average	10·38
50 % of average	5·19
65 % of average	6·75
75 % of average	7·79

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1893	14·60	...	...	...
1894	7·45	...	...	F1
1895	8·77	...	...	...
1896	10·47	...	...	...
1897	9·98	...	...	...
1898	8·06	...	...	...
1899	9·89	...	...	...
1900	13·30	...	...	...
1901	11·35	...	...	...
1902	15·16	...	...	...
1903	13·94	...	...	...
1904	12·90	...	...	...
1905	5·79	...	F1	F1
1906	10·09	...	...	...
1907	15·89	...	...	...
1908	4·04	F1	F1	F1
1909	12·53	...	...	...
1910	12·14	...	...	...
1911	7·22	...	...	F1
1912	4·24	F1	F1	F1

DISTRICT.

TALUK.

January to October—

Accepted average	26·20
50 % of average	13·10
65 % of average	17·03
75 % of average	19·65

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·70	...	...	...	 1893
21·30	...	...	...	 1894
28·64	...	...	...	 1895
23·45	...	...	...	 1896
34·93	...	...	...	 1897
20·69	...	...	...	 1898
20·71	...	...	...	 1899
24·67	...	...	...	 1900
27·47	...	...	...	 1901
36·74	...	...	...	 1902
47·62	...	...	...	 1903
21·90	...	...	...	 1904
21·18	...	...	...	 1905
30·17	...	...	...	 1906
27·40	...	...	...	 1907
13·18	...	F2	F2	 1908
25·40	...	...	...	 1909
35·88	...	...	...	 1910
15·24	...	F2	F2	 1911
23·89	...	...	...	 1912

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KOLAR

SIDLAGHATTA

January to July—

Accepted average	10·42
50 % of average	5·21
65 % of average	6·77
75 % of average	7·82

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75% basis
1872	9·50	...	...	...
1873	4·05	F1	F1	F1
1874	15·80	...	...	...
1875	15·68	...	...	...
1876	7·25	...	...	F1
1877	0·35	F1	F1	F1
1878	10·79	...	...	...
1879	9·34	...	...	...
1880	8·20	...	...	...
1881	4·25	F1	F1	F1
1882	4·40	F1	F1	F1
1883	7·89	...	...	...
1884	2·60	F1	F1	F1
1885	11·56	...	...	...
1886	10·68	...	...	...
1887	8·77	...	...	...
1888	8·46	...	...	...
1889	11·58	...	...	...
1890	11·90	...	...	...
1891	5·97	...	F1	F1
1892	13.99	...	...	...
1893	12·78	...	...	...
1894	12·80	...	...	...
1895	13·05	...	...	...

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TALUK.

January to October—

Accepted average	23.93
50 % of average	11·97
65 % of average	15·55
75 % of average	17·95

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
32·15	...	...	...	 1872
22·20	...	...	...	 1873
43·22	...	...	...	 1874
20·35	...	...	...	 1875
8·37	F2	F2	F2	 1876
14·15	...	F2	F2	 1877
17·79	...	...	F2	 1878
11·72	F2	F2	F2	 1879
26·40	...	...	...	 1880
10·97	F2	F2	F2	 1881
11·10	F2	F2	F2	 1882
18·19	...	...	...	 1883
13·00	...	F2	F2	 1884
23·13	...	...	...	 1885
24·26	...	...	...	 1886
23·21	...	...	...	 1887
18·59	...	...	...	 1888
35·23	...	...	...	 1889
24·80	...	...	...	 1890
17·00	...	...	F2	 1891
29·51	...	...	...	 1892
28·04	...	...	...	 1893
27·30	...	...	...	 1894
29·90	...	...	...	 1895

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KOLAR

SIDLAGHATTA

January to July—

Accepted average	10·42
50 % of average	5·21
65 % of average	6·77
75 % of averege	7·82

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1896	9·44	...	...	...
1897	8·36	...	..	...
1898	5·81	...	F1	F1
1899	7·97	...	...	...
1900	11·90	...	...	...
1901	18·21	...	...	...
1902	9·09	...	...	...
1903	10·77	...	...	...
1904	12·24	...	...	...
1905	11·49	...	...	...
1906	9·35	...	...	...
1907	11·11	...	...	...
1908	9·76	...	...	...
1909	14·92	...	...	...
1910	17·47	...	...	...
1911	10·10	...	...	...
1912	7·38	...	...	F1

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TALUK—*concld.*

January to October—

Accepted average	23·93
50 % of average	11·97
65 % of average	15·55
75 % of average	17·95

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
20·01	...	...	...	 1896
29·85	...	...	...	 1897
18·20	...	...	...	 1898
26·72	...	...	...	 1899
25·84	...	...	...	 1900
28·18	...	...	...	 1901
29·25	...	...	...	 1902
33·95	...	...	...	 1903
24·32	...	...	...	 1904
22·33	...	...	...	 1905
28·08	...	...	...	 1906
20·35	...	...	...	 1907
19·39	...	...	...	 1908
29·78	...	...	...	 1909
37·91	...	..	...	 1910
25·62	...	...	...	 1911
31·00	...	...	...	 1912

KOLAR

CHIKBALLAPUR

January to July—

Accepted average	11·86
50 % of average	5·93
60 % of average	7·71
75 % of average	8·90

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	10·85	...	...	...
1871	11·28	...	...	...
1872	Not available			
1873	6·52	...	F1	F1
1874	17·68	...	...	...
1875	13·60	...	...	...
1876	11·65	...	...	...
1877	8·85	...	...	F1
1878	13·81	...	...	...
1879	20·66	...	...	...
1880	13·65	...	...	...
1881	5·00	F1	F1	F1
1882	14·39	...	...	...
1883	9·60	...	...	...
1884	4·45	F1	F1	F1
1885	13·22	...	...	...
1886	8·48	...	...	F1
1887	9·59	...	...	...
1888	5·71	F1	F1	F1
1889	8·50	...	...	F1
1890	8·79	...	...	F1
1891	6·67	...	F1	F1
1892	14·45	...	...	...
1893	16·23	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	28·36
50 % of average	14·18
65 % of average	18·43
75 % of average	21·27

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
26·75	...	...	...	 1870
21·68	..	...	...	 1871
Not available				1872
30·01	...	...	...	 1873
46·48	...	...	...	 1874
25·90	...	...	...	 1875
16·40	...	F2	F2	 1876
30·80	...	...	...	 1877
41·89	...	...	...	 1878
33·25	...	...	...	 1879
34·20	...	...	...	 1880
18·65	...	...	F2	 1881
30·87	...	...	...	 1882
29·41	...	...	...	 1883
14·52	...	F2	F2	 1884
27·12	...	...	...	 1885
23·96	...	...	...	 1886
29·33	...	...	...	 1887
22·07	...	...	...	 1888
24·45	...	...	...	 1889
24·81	...	...	...	 1890
19·77	...	...	F2	 1891
26·35	...	...	...	 1892
32·61	...	...	...	 1893

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KOLAR

CHIKBALLAPUR

January to July—

Accepted average	11·86
50 % of average	5·93
65 % of average	7·71
75 % of average	8·90

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	9·74	...	...	...
1895	14·96	...	...	...
1896	9·77	...	...	...
1897	11·35	...	...	...
1898	6·50	...	F1	F1
1899	9·11	...	...	...
1900	11·70	...	...	...
1901	16·22	...	...	...
1902	15·13	...	...	...
1903	16.13	...	...	...
1904	14·53	...	...	...
1905	16·71	...	...	...
1906	12·74	...	...	...
1907	13·07	...	...	...
1908	7·60	...	F1	F1
1909	12·35	...	...	...
1910	12·59	...	...	...
1911	14·84	...	...	...
1912	8·09	...	...	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	28·36
50 % of average	14·18
65 % of average	18·43
75 % of average	21·27

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·42	...	...	...	 1894
35·71	...	...	...	 1895
22·89	...	...	...	 1896
29·56	...	...	...	 1897
24·63	...	...	...	 1898
31·41	...	...	...	 1899
27·14	...	...	...	 1900
31·99	...	...	...	 1901
44·21	...	...	...	 1902
43·24	...	...	...	 1903
24·37	...	...	...	 1904
26·07	...	...	...	 1905
31·04	...	...	...	 1906
18·21	...	F2	F2	 1907
14·27	...	F2	F2	 1908
25·40	...	...	...	 1909
29·80	...	...	...	 1910
27·19	...	...	...	 1911
26·89	...	...	...	 1912

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KOLAR

BAGEPALLI

January to July—

Accepted average	8·84
50 % of average	4·42
65 % of average	5·80
75 % of average	6·63

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1893	9·20	...	...	...
1894	5·95	...	...	F1
1895	11·37	...	...	...
1896	9·86	...	...	...
1897	8·21	...	...	...
1898	2·91	F1	F1	F1
1899	4·53	...	F1	F1
1900	9·68	...	...	...
1901	7·23	...	...	...
1902	11·75	...	...	...
1903	7·64	...	...	...
1904	7·44	...	...	...
1905	7·89	...	...	...
1906	10·78	...	...	...
1907	16·27	...	...	...
1908	6·91	...	...	...
1909	7·88	...	...	...
1910	14·05	...	...	...
1911	9·40	...	...	...
1912	8·07	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	22·08
50 % of average	11·04
65 % of average	14·35
75 % of average	16·56

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
17·60	...	...	...	 1893
25·79	...	...	...	 1894
24·83	...	...	...	 1895
14·29	...	F2	F2	 1896
27·60	...	...	...	 1897
13·01	...	F2	F2	 1898
18·27	...	...	...	 1899
23·87	...	...	...	 1900
20·24	...	...	...	 1901
26·70	...	...	...	 1902
24·82	...	...	...	 1903
12·69	...	F2	F2	 1904
21·94	...	...	...	 1905
28·23	...	...	...	 1906
25·58	...	...	...	 1907
15·30	...	...	F2	 1908
24·68	...	...	...	 1909
35·47	...	...	...	 1910
16·88	...	...	...	 1911
23·85	...	...	...	 1912

KOLAR

GORIBIDNUR

January to July—

Accepted average	9·39
50 % of average	4·70
65 % of average	6·10
75 % of average	7·05

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	6·65	...	...	F1
1884	3·59	F1	F1	F1
1885	7·50	...	...	...
1886	6·35	...	..	F1
1887	5·50	..	F1	F1
1888	8·25	...	...	...
1889	8·32	...	...	...
1890	10·45	...	...	...
1891	3·80	F1	F1	F1
1892	16·60	...	...	...
1893	14·01	...	...	...
1894	5·90	...	F1	F1
1895	11·20	...	...	...
1896	10·25	...	...	...
1897	5·59	...	F1	F1
1898	9·04	...	...	...
1899	5·35	...	F1	F1
1900	10·85	...	...	...
1901	14·61	...	...	...
1902	9·64	...	...	...
1903	10·23	...	...	...
1904	11·80	...	...	...
1905	8·08	...	...	...
1906	11·72	...	...	...

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TALUK.

January to October—

Accepted average	23·42
50 % of average	11·71
65 % of average	15·22
75 % of average	17·57

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·75	...	...	...	 1883
7·59	F2	F2	F2	 1884
22·90	...	...	...	 1885
13·48	...	F2	F2	 1886
22·25	...	...	...	 1887
18·38	...	...	...	 1888
31·42	...	...	...	 1889
29·50	...	...	...	 1890
10·50	F2	F2	F2	 1891
26·20	...	...	...	 1892
26·02	...	...	...	 1893
17·45	...	...	F2	 1894
26·10	...	...	...	 1895
18·24	...	...	...	 1896
31·35	...	...	...	 1897
26·90	...	...	...	 1898
16·84	...	...	F2	 1899
22·61	...	...	...	 1900
25·40	...	...	...	 1901
27·19	...	...	...	 1902
32·46	...	...	...	 1903
21·80	...	...	...	 1904
21·25	...	...	...	 1905
27·06	...	...	...	 1906

CSL

KOLAR

GORIBIDNUR

January to July—

Accepted average	9·39
50 % of average	4·70
65 % of average	6·10
75 % of average	7·05

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	11·81	...	...	...
1908	9·16	...	...	...
1909	12·59	...	...	...
1910	14·95	...	...	...
1911	9·18	...	...	...
1912	9·02	...	...	...

GSL

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	23·42
50 % of average	11·71
65 % of average	15·22
75 % of average	17·57

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·64	...	...	...	 1907
17·60	...	...	...	 1908
34·67	...	...	...	 1909
32·26	...	...	...	 1910
20·27	...	...	...	 1911
29·60	...	...	...	 1912

CSL

KOLAR

MALUR

January to July—

Accepted average	10·55
50 % of average	5·28
65 % of average	6·86
75 % of average	7·92

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1893	15·89	...	...	...
1894	7·50	...	...	F1
1895	11·95	...	...	...
1896	6·84	...	F1	F1
1897	8·60	...	...	...
1898	11·15	...	...	...
1899	10·54	...	...	...
1900	12·56	...	...	...
1901	11·28	...	...	...
1902	10·22	...	...	...
1903	13·69	...	...	...
1904	15·97	...	...	...
1905	9·67	...	...	...
1906	12·58	...	...	...
1907	11·54	...	...	...
1908	13·52	...	...	...
1909	11·44	...	...	...
1910	13·93	...	...	...
1911	12·86	...	...	...
1912	6·36	...	F1	F1

CSL

DISTRICT.

TALUK.

January to October—

Accepted average	26·10
50 % of average	13·05
65 % of average	16·96
75 % of average	19·58

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
29·41	...	...	...	 1893
25·32	...	...	...	 1894
30·39	...	...	...	 1895
24·33	...	...	...	 1896
30·59	...	...	...	 1897
24·68	...	...	...	 1898
24·44	...	...	...	 1899
26·33	...	...	...	 1900
19·69	...	...	...	 1901
30·67	...	...	...	 1902
31·14	...	...	...	 1903
32·37	...	...	...	 1904
21·84	...	...	...	 1905
35·37	...	...	...	 1906
21·29	...	...	...	 1907
21·26	...	...	...	 1908
30·53	...	...	...	 1909
33·92	...	...	...	 1910
23·37	...	...	...	 1911
27·31	...	...	...	 1912

KOLAR

SRINIVASAPUR

January to July—

Accepted average	9·87
50 % of average	4·94
65 % of average	6·41
75 % of average	7·40

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1885	6·20	...	F1	F1
1886	12·05	...	...	...
1887	5·21	...	F1	F1
1888	9·43	...	...	...
1889	10·08	...	...	...
1890	5·60	...	F1	F1
1891	6·36	...	F1	F1
1892	16·06	...	...	...
1893	11·62	...	...	...
1894	9·65	...	...	...
1895	9·85	...	...	...
1896	6·21	...	F1	F1
1897	12·51	...	...	...
1898	9·62	...	...	...
1899	7·06	...	...	F1
1900	14·57	...	...	...
1901	11·93	...	...	...
1902	9·49	...	...	...
1903	13·35	...	...	...
1904	11·07	...	...	...
1905	8·67	...	...	...
1906	9·90	...	...	...
1907	15·04	...	...	...
1908	6·14	...	F1	F1

DISTRICT.

TALUK.

January to October—

Accepted average	24·58
50 % of average	12·29
65 % of average	15·98
75 % of average	18·43

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
16·00	...	...	F1	1885
25·45	...	...	...	1886
19·13	...	...	...	1887
23·19	...	...	...	1888
30·17	...	...	...	1889
20·55	...	...	...	1890
13·31	...	F2	F2	1891
31·25	...	...	...	1892
23·84	...	...	...	1893
28·38	...	...	...	1894
30·67	...	...	...	1895
17·45	...	...	F2	1896
31·72	...	...	...	1897
17·97	...	...	F2	1898
19·32	...	...	...	1899
25·16	...	...	...	1900
24·65	...	...	...	1901
26·12	...	...	...	1902
35·72	...	...	...	1903
20·24	...	...	...	1904
21·13	...	...	...	1905
32·48	...	...	...	1906
25·76	...	...	...	1907
14·59	...	F2	F2	1908

KOLAR

SRINIVASAPUR

January to July—

Accepted average	9·87
50 % of average	4·94
65 % of average	6·41
75 % of average	7·40

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1909	13·57	...	...	...
1910	14·76	..	...	...
1911	15·87	...	...	...
1912	5·90	...	F1	F1

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·58
50 % of average	12·29
65 % of average	15·98
75 % of average	18·43

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
28·51	...	...	...	 1909
32·44	...	...	...	 1910
23·14	...	...	...	 1911
24·99	...	...	...	 1912

GSL

KOLAR

GUDIBANDA

January to July—

Accepted average	11·31
50 % of average	5·66
65 % of average	7·35
75 % of average	8·48

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failuress 75 % basis
1884	2·66	F1	F1	F1
1885	14·09	...	...	...
1886	Not	available		
1887	10·99	...	...	...
1888	9·43	...	...	...
1889	10·32	...	...	...
1890	10·11	...	...	...
1891	7·69	...	...	F1
1892	16·77	...	...	...
1893	16·70	...	...	...
1894	8·41	...	...	F1
1895	15·41	...	...	..
1896	10·05	...	...	...
1897	6·64	...	F1	F1
1898	6·43	...	F1	F1
1899	5·20	F1	F1	F1
1900	18·29	...	...	...
1901	13·37	...	...	...
1902	11·73	...	...	...
1903	13·52	...	...	...
1904	12·98	...	...	...
1905	13·88	...	...	...
1906	15·70	...	...	...
1907	12·82	...	...	...

DISTRICT.

SUB-TALUK.

January to October—

Accepted average	26·87
50 % of average	13·44
65 % of average	17·46
75 % of average	20·15

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
11·71	F2	F2	F2	 1884
29·20	...	.	...	 1885
Not	available			... 1886
28·46		...	...	 1887
26·85	...	...	...	 1888
26·69	...	...	...	 1889
26·06	...	...	...	 1890
15·76	...	F2	F2	 1891
31·27	...	...	...	 1892
30·39	..	...	...	 1893
25·61	...	...	...	 1894
33·11	...	...	...	 1895
20·01	...	...	F2	 1896
27·51	..	...	...	 1897
16·90	...	F2	F2	 1898
20·69	...	...	...	 1899
38·72	...	...	...	 1900
24·03	...	...	..	 1901
36·35	...	...	...	 1902
35·53	...	...	...	 1903
25·12	...	...	...	 1904
32·78	...	...	...	 1905
37·36	...	...	...	 1906
25·40	...	...	...	 1907

KOLAR

GUDIBANDA

January to July—

Accepted average	11·31
50 % of average	5·66
65 % of average	7·35
75 % of average	8·48

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1908	6·51	...	F1	F1
1909	13·33	...	...	...
1910	10·17	...	...	...
1911	15·06	...	...	...
1912	15·59	...	...	...

DISTRICT.

SUB-TALUK—*concld.*

January to October—

Accepted average	26·87
50 % of average	13·44
65 % of average	17·46
75 % of average	20·15

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
14·34	...	F2	F2	 1908
32·72	...	...	...	 1909
34·21	...	...	...	 1910
26·57	...	...	...	 1911
34·44	...	...	...	 1912

CSL

TUMKUR

TUMKUR

January to July—

Accepted average	13·91
50 % of average	6·96
65 % of average	9·04
75 % of average	10·43

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	Not available			
1871	18·97	...	...	...
1872	9.21	...	...	F1
1873	6·23	F1	F1	F1
1874	19·83	...	...	...
1875	8·98	...	F1	F1
1876	11·95	...	...	...
1877	12·96	...	...	...
1878	15·26	...	...	...
1879	22·10	...	...	...
1880	19·10	...	...	...
1881	6·11	F1	F1	F1
1882	11·71	...	...	...
1883	10·69	...	...	...
1884	8·35	...	F1	F1
1885	10·27	...	..	F1
1886	21·53	..	...	...
1887	9·20	...	...	F1
1888	14·21	...	...	...
1889	15·25	...	...	...
1890	16·12	...	...	...
1891	12·06	...	...	...
1892	25·59	...	...	...
1893	27·39	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	32·27
50 % of average	16·14
65 % of average	20·98
75 % of average	24·20

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
Not available				1870
31·78	...	...	...	1871
19·45	...	F2	F2	1872
20·01	...	F2	F2	1873
60·65	...	...	...	1874
8·98	F2	F2	F2	1875
19·95	...	F2	F2	1876
22·30	...	...	F2	1877
43·22	...	...	...	1878
34·12	...	...	...	1879
33·65	...	...	...	1880
23·21	...	...	F2	1881
30·10	...	...	...	1882
36·22	...	...	...	1883
19·18	...	F2	F2	1884
23·41	...	...	F2	1885
46·11	...	...	...	1886
27·36	...	...	...	1887
29·29	...	...	...	1888
54·77	...	...	...	1889
30·29	...	...	...	1890
21·04	...	...	F2	1891
40·05	...	...	...	1892
44·67	...	...	...	1893

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TUMKUR

TUMKUR

January to July—

Accepted average	13·91
50 % of average	6·96
65 % of average	9·04
75 % of average	10·43

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	15·50	...	...	...
1895	13·31	...	...	...
1896	13·03	...	...	...
1897	17·03	...	...	...
1898	15·42	...	...	...
1899	7·30	...	F1	F1
1900	14·31	...	...	...
1901	10·22	..	...	F1
1902	8·38	...	F1	F1
1903	10·90	...	...	...
1904	16·99	...	...	...
1905	12·97	...	...	...
1906	9·96	...	...	F1
1907	16·10	...	...	...
1908	11·80	..	...	...
1909	11·94	...	...	...
1910	16·25	...	...	...
1911	9·87	...	...	F1
1912	14·39	...	...	..

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	32·27
50 % of average	16·14
65 % of average	20·98
75 % of average	24·20

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
38·93	...	...	...	 1894
35·72	...	...	...	 1895
27·86	...	...	...	 1896
46·07	...	...	...	 1897
41·72	...	...	..	 1898
29·97	...	...	...	 1899
30·28	...	...	...	 1900
27·94	...	...	...	 1901
33·77	...	...	...	 1902
45·14	...	...	...	 1903
32·70	...	...	...	 1904
27·48	...	...	...	 1905
40·52	...	...	...	 1906
34·79	...	...	...	 1907
24·14	...	...	F2	 1908
33·08	...	...	...	 1909
35·73	...	...	...	 1910
19·06	...	F2	F2	 1911
31·00	...	...	...	 1912

CSL

TUMKUR

MADDAGIRI

January to July—

Accepted average	9·97
50 % of average	4·99
65 % of average	6·48
75 % of average	7·48

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	16·92	...	...	...
1884	2·96	F1	F1	F1
1885	8·55	...	...	...
1886	14·54	...	...	...
1887	6·76	...	...	F1
1888	10·12	...	...	...
1889	10·15	...	...	...
1890	13·63	...	...	...
1891	4·50	F1	F1	F1
1892	17·63	...	...	...
1893	16·02	...	...	...
1894	7·40	...	...	F1
1895	12·70	...	...	...
1896	7·94	...	...	...
1897	7·65	...	...	...
1898	7·46	...	...	F1
1899	5·76	...	F1	F1
1900	8·47	...	...	...
1901	8·38	...	...	...
1902	11·05	...	...	...
1903	7·19	...	...	F1
1904	11·31	...	...	...
1905	10·35	...	...	...
1906	6·37	...	F1	F1

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DISTRICT.

TALUK.

January to October—

Accepted average	23·90
50 % of average	11·95
65 % of average	15·54
75 % of average	17·93

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
36·33	...	...	...	 1883
9·92	F2	F2	F2	 1884
20·31	...	...	...	 1885
21·77	...	...	...	 1886
21·78	...	...	...	 1887
19·13	...	...	...	 1888
21·32	...	...	...	 1889
23·28	...	...	...	 1890
15·75	...	...	F2	 1891
26·83	...	...	...	 1892
30·77	...	...	...	 1893
19·65	...	...	...	 1894
31·55	...	...	...	 1895
14·61	...	F2	F2	 1896
27·89	...	...	...	 1897
22·88	...	...	...	 1898
28·31	...	...	...	 1899
18·13	...	...	...	 1900
29·97	...	...	...	 1901
27·52	...	...	...	 1902
22·74	...	...	...	 1903
18·44	...	...	...	 1904
23·17	...	...	...	 1905
31·48	...	...	...	 1906

GSL

TUMKUR

MADDAGIRI

January to July—

Accepted average	9·97
50 % of average	4·99
65 % of average	6·48
75 % of average	7·48

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	9·81	...	...	...
1908	9·01	...	...	...
1909	12·49	...	...	...
1910	14·67	...	...	...
1911	7·89	...	...	...
1912	11·70	...	...	..

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	23·90
50 % of average	11·95
65 % of average	15·54
75 % of average	17·93

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
15·01		F2	F2	 1907
18·25	...	...	...	 1908
33·29	...	...	...	 1909
36·83	...	...	...	 1910
18·17	...	...	...	 1911
32·08	...	...	...	 1912

TUMKUR

CHIKNAYAKANHALLI

January to July—

Accepted average	10·02
50 % of average	5·01
65 % of average	6·51
75 % of average	7·52

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1879	5·61	...	F1	F1
1880	6·07	...	F1	F1
1881	1·86	F1	F1	F1
1882	5·63	...	F1	F1
1883	14·46	...	...	...
1884	3·14	F1	F1	F1
1885	6·38	...	F1	F1
1886	14·75	...	...	...
1887	13·07	...	...	...
1888	6·75	...	...	F1
1889	13·15	...	...	...
1890	11·30	...	...	...
1891	11·06	...	...	...
1892	12·83	...	...	...
1893	21·60	...	...	...
1894	10·39	...	...	...
1895	14·78	...	...	...
1896	10·13	...	...	...
1897	11·64	...	...	...
1898	14·22	...	...	...
1899	7·57	...	...	...
1900	6·43	...	F1	F1
1901	12·44	...	...	...
1902	10·23	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	22·56
50 % of average	11·28
65 % of average	14·66
75 % of average	16·92

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
8·09	F2	F2	F2	1879
11·77	...	F2	F2	1880
6·69	F2	F2	F2	1881
21·67	...	...	...	1882
30·84	...	...	...	1883
9·46	F2	F2	F2	1884
47·99	...	...	...	1885
29·75	...	...	...	1886
25·67	...	...	...	1887
16·95	...	...	...	1888
29·73	...	...	...	1889
22·30	...	...	...	1890
18·46	...	...	...	1891
25·05	...	...	...	1892
35·67	...	...	...	1893
18·25	...	...	...	1894
31·72	...	...	...	1895
18·32	...	...	...	1896
33·14	...	...	...	1897
30·47	...	...	...	1898
26·81	...	...	...	1899
15·73	...	...	F2	1900
29·31	...	...	...	1901
26·22	...	...	...	1902

TUMKUR

CHIKNAYAKANHALLI

January to July—

Accepted average	10·02
50 % of average	5·01
65 % of average	6·51
75 % of average	7·52

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1903	6·91	...	...	F1
1904	14·45	...	...	...
1905	12·70	...	...	...
1906	7·02	...	...	F1
1907	11·57	...	...	...
1908	8·15	...	...	...
1909	12·37	...	...	...
1910	14·72	...	...	...
1911	9·83	...	...	...
1912	9·01	...	...	...

GSL

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	22·56
50 % of average	11·28
65 % of average	14·66
75 % of average	16·92

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·78	...	...	...	 1903
22·07	...	...	...	 1904
19·80	...	...	...	 1905
31·64	...	...	...	 1906
21·86	...	...	...	 1907
14·76	...	...	F2	 1908
32·30	...	...	...	 1909
32·02	...	...	...	 1910
18·38	...	...	...	 1911
30·40	...	...	...	 1912

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TUMKUR

SIRA

January to July

Accepted average	9·06
50 % of average	4·53
65 % of average	5·89
75 % of average	6·79

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1893	12·10	...	...	...
1894	11·94	...	...	...
1895	12·49	...	...	...
1896	8·68	...	...	...
1897	9·48	...	...	...
1898	9·88	...	...	...
1899	4·45	F1	F1	F1
1900	9·81	...	...	...
1901	9·27	...	...	...
1902	8·58	...	...	...
1903	8·69	...	...	...
1904	5·21	...	F1	F1
1905	7·95	...	...	...
1906	9·03	...	...	...
1907	7·30	...	...	...
1908	8·51	...	...	...
1909	11·21	...	...	...
1910	12·59	...	...	...
1911	5·02	...	F1	F1
1912	9·23	...	...	...

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DISTRICT.

TALUK.

January to October—

Accepted average	21·42
50 % of average	10·71
65 % of average	13·92
75 % of average	16·06

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
18·63	...	...	...	 1893
24·90	...	...	...	 1894
22·48	...	...	...	 1895
14·08	...	...	F2	 1896
34·62	...	...	...	 1897
21·74	...	...	...	 1898
16·90	...	...	...	 1899
19·67	...	...	...	 1900
23·96	...	...	...	 1901
22·81	...	...	...	 1902
29·00	...	...	...	 1903
13·89	...	F2	F2	 1904
13·21	...	F2	F2	 1905
26·91	...	...	...	 1906
13.85	...	F2	F2	 1907
18·04	...	...	...	 1908
23·95	...	...	...	 1909
30·89	...	...	...	 1910
13·01	...	F2	F2	 1911
25·91	...	...	...	 1912

CSL

TUMKUR

GUBBI

January to July—

Accepted average	10·75
50 % of average	5·38
65 % of average	6·99
75 % of average	8·06

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	10·65	...	...	...
1871	5·10	F1	F1	F1
1872	11·90	...	...	...
1873	4·85	F1	F1	F1
1874	4·60	F1	F1	F1
1875	13·90	...	...	...
1876	4·35	F1	F1	F1
1877	5·65	...	F1	F1
1878	12·70	...	...	...
1879	16·30	...	...	...
1880	16·40	...	...	...
1881	7·15	...	...	F1
1882	7·50	...	...	F1
1883	7·40	...	...	F1
1884	6·08	...	F1	F1
1885	7·32	...	...	F1
1886	24·80	...	...	...
1887	9·20	...	...	...
1888	8·95	...	...	...
1889	16·40	...	...	...
1890	12·05	...	...	...
1891	8·45	...	...	...
1892	14·70	...	...	...
1893	17·80	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	25·32
50 % of average	12·66
65 % of average	16·46
75 % of average	18·99

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·60	...	...	...	1870
11·50	F2	F2	F2	1871
29·90	...	...	...	1872
9·40	F2	F2	F2	1873
7·10	F2	F2	F2	1874
36·20	...	...	...	1875
7·10	F2	F2	F2	1876
12·80	...	F2	F2	1877
32·80	...	...	...	1878
26·30	...	...	...	1879
32·50	...	...	...	1880
22·25	...	...	...	1881
22·20	...	...	...	1882
37·50	...	...	...	1883
12·15	F2	F2	F2	1884
21·73	...	...	...	1885
38·15	...	...	...	1886
24·95	...	...	...	1887
23·45	...	...	...	1888
44·40	...	...	...	1889
26·67	...	...	...	1890
20·05	...	...	...	1891
28·10	...	...	...	1892
30·00	...	...	...	1893

CSL

TUMKUR

GUBBI

January to July—

Accepted average	10·75
50 % of average	5·38
65 % of average	6·99
75 % of average	8·06

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	8·60	...	...	...
1895	10·30	...	...	...
1896	7·20	...	...	F1
1897	10·85	...	...	...
1898	8·25	...	...	...
1899	7·10	...	...	F1
1900	8·40	...	...	...
1901	11·25	...	...	...
1902	8·90	...	...	...
1903	10·00	...	...	...
1904	10·45	...	...	...
1905	8·48	...	...	...
1906	9·67	...	...	...
1907	13·07	...	...	...
1908	17·19	...	...	...
1909	16·33	...	...	...
1910	17.64	...	...	...
1911	7·96	...	...	F1
1912	16·72	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	25·32
50 % of average	12·66
65 % of average	16·46
75 % of average	18·99

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
17·30	...	...	F2	 1894
27·00	...	...	...	 1895
18·90	...	...	F2	 1896
34·10	...	...	...	 1897
31·15	...	...	...	 1898
23·45	...	...	...	 1899
18·60	...	...	F2	 1900
30·00	...	...	..	 1901
29·10	...	...	...	 1902
36·95	...	...	...	 1903
22·06	...	...	...	 1904
19·38	...	...	...	 1905
31·04	...	...	...	 1906
22·48	...	...	...	 1907
22·54	...	...	...	 1908
31·90	...	...	...	 1909
38·87	...	...	...	 1910
16·78	...	...	F2	 1911
36·73	...	...	...	 1912

TUMKUR

TIPTUR

January to July—

Accepted average	9.46
50 % of average	4·73
65 % of average	6·15
75 % of average	7·09

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1881	7·46	...	...	..
1882	8·97	...	...	...
1883	10·25	...	...	...
1884	8·00	...	...	...
1885	4·60	F1	F1	F1
1886	12·10	...	...	...
1887	6·50	...	...	F1
1888	8·32	...	...	...
1889	14·20	...	...	...
1890	7·30	...	...	...
1891	8·15	...	...	...
1892	15·92	...	...	...
1893	13·03	...	...	...
1894	7·25	...	...	...
1895	15·92	...	...	...
1896	11·95	...	...	...
1897	9·95	...	...	...
1898	5·62	...	F1	F1
1899	5·26	...	F1	F1
1900	7·45	...	...	...
1901	9·28	...	...	...
1902	9·40	...	...	...
1903	9·14	...	...	..
1904	14·75	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	23·50
50 % of average	11·75
65 % of average	15·28
75 % of average	17·63

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
16·00	...	...	F2	 1881
24·69	...	...	...	 1882
33·52	...	...	...	 1883
19·85	...	...	...	 1884
24·85	...	...	...	 1885
26·67	...	...	...	 1886
17·15	...	...	F2	 1887
20·42	...	...	...	 1888
30·05	...	...	...	 1889
10·75	F2	F2	F2	 1890
16·75	...	...	F2	 1891
25·32	...	...	...	 1892
27·48	...	...	...	 1893
18·07	...	...	...	 1894
32·10	...	...	...	 1895
17·52	...	...	F2	 1896
29·70	...	...	...	 1897
24·91	...	...	...	 1898
21·00	...	...	...	 1899
19·63	...	...	...	 1900
20·09	...	...	...	 1901
26·17	...	...	...	 1902
21·29	...	...	...	 1903
20·64	...	...	...	 1904

TUMKUR

TIPTUR

January to July—

Accepted average	9·46
50 % of average	4·73
65 % of average	6·15
75 % of average	7·09

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1905	14·12	...	...	...
1906	4·49	F1	F1	F1
1907	8·44	...	...	...
1908	5·78	...	F1	F1
1909	9·84	...	...	...
1910	15·80	...	...	...
1911	7·45	...	...	...
1912	9·06	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average ... ... 23·50
50 % of average ... ... 11·75
65 % of average ... ... 15·28
75 % of average ... ... 17·63

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
26·32	...	...	...	 1905
38·92	...	...	...	 1906
15·36	...	...	F2	 1907
10·82	F2	F2	F2	 1908
21·14	...	...	...	 1909
27·58	...	...	...	 1910
19·20	...	...	...	 1911
24·02	...	...	...	 1912

CSL

TUMKUR

PAVAGADA

January to July—

Accepted average	7·23
50 % of average	3·62
65 % of average	4·70
75 % of average	5·43

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	5·25	...	...	F1
1871	6·58	...	...	...
1872	3·60	F1	F1	F1
1873	3·71	...	F1	F1
1874	16·72	...	...	...
1875	10·52	...	...	...
1876	5·60	...	...	...
1877	6·15	...	...	...
1878	8·00	...	...	...
1879	18·80	...	...	...
1880	5·95	...	...	...
1881	3·30	F1	F1	F1
1882	3·70	...	F1	F1
1883	6·95	...	...	...
1884	3·10	F1	F1	F1
1885	5·17	...	..	F1
1886	11·23	...	...	...
1887	4·98	..	...	F1
1888	8·09	...	...	...
1889	7·04	...	...	...
1890	4·16	...	F1	F1
1891	11·73	...	...	...
1892	8·97	...	...	...
1893	12·07	...	...	...

GSL

DISTRICT.

TALUK.

January to October—

Accepted average	18·53
50 % of average	9·27
65 % of average	12·04
75 % of average	13·90

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
16·90	...	...	...	 1870
18·53	...	...	...	 1871
15·52	...	...	...	 1872
16·58	...	...	...	 1873
41·02	...	...	...	 1874
15·47	...	...	...	 1875
8·70	F2	F2	F2	 1876
25·10	..	...	...	 1877
30·90	...	...	...	 1878
26·60	...	...	...	 1879
18·45	...	...	...	 1880
12·30	...	...	F2	 1881
12·70	...	...	F2	 1882
23·85	...	...	...	 1883
8·73	F2	F2	F2	 1884
12·07	...	...	F2	 1885
19·40	...	...	...	 1886
14·95	...	...	...	 1887
15·19	...	...	...	 1888
18·34	...	...	...	 1889
13·56	...	...	F2	 1890
15·38	...	...	...	 1891
17·01	...	...	...	 1892
25·07	...	...	...	 1893

CSL

TUMKUR

PAVAGADA

January to July—

Accepted average	7·23
50 % of average	3·62
65 % of average	4·70
75 % of average	5·43

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	4.75	...	...	F1
1895	7·21	...	...	...
1896	4·96	...	...	F1
1897	3·02	F1	F1	F1
1898	3·66	...	F1	F1
1899	5·65	...	...	...
1900	12·15	...	...	...
1901	5·41	...	...	F1
1902	5·81	...	...	...
1903	10·79	...	...	...
1904	10·17	...	...	...
1905	7·99	...	...	...
1906	6·90	...	...	...
1907	6·41	...	...	...
1908	4·60	...	F1	F1
1909	9·52	...	...	...
1910	9·34	...	...	...
1911	6·28	...	...	...
1912	5·05	...	...	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	18·53
50 % of average	9·27
65 % of average	12·04
75 % of average	13·90

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
18·79	...	...	...	1894
25·71	...	...	...	1895
12·81	...	...	F2	1896
22·22	...	...	...	1897
12·11	...	...	F2	1898
21·03	...	...	...	1899
26·53	...	...	...	1900
15·33	...	...	...	1901
17·32	...	...	...	1902
23·77	...	...	...	1903
19·56	...	...	...	1904
14·78	...	...	...	1905
17·40	...	...	...	1906
15·66	...	...	...	1907
10·16	...	F2	F2	1908
20·44	...	...	...	1909
24·74	...	...	...	1910
15·03	...	...	...	1911
21·27	...	...	...	1912

CSL

TUMKUR

KUNIGAL

January to July—

Accepted average	11·07
50 % of average	5·54
65 % of average	7·20
75 % of average	8·30

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1876	8·76	...	...	...
1877	10·61	...	...	...
1878	10·20	...	...	...
1879	20·13	...	...	...
1880	11·20	...	...	...
1881	10·40	...	...	...
1882	8·30	...	...	...
1883	8·50	...	...	...
1884	3·80	F1	F1	F1
1885	9·08	...	...	...
1886	20·46	...	...	...
1887	11·20	...	...	...
1888	12·14	...	...	...
1889	10·50	...	...	...
1890	12·80	...	...	...
1891	9·15	...	...	...
1892	16·24	...	...	...
1893	25·28	...	...	...
1894	11·08	...	...	...
1895	13·29	...	...	...
1896	6·39	...	F1	F1
1897	9·25	...	...	...
1898	8·33	...	...	...
1899	8·84	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	29·64
50 % of average	14·82
65 % of average	19·27
75 % of average	22·23

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
16·53	...	F2	F2	 1876
25·49	...	...	...	 1877
31·15	...	...	...	 1878
32·23	...	...	...	 1879
38·05	...	...	...	 1880
21·80	...	...	F2	 1881
22·85	...	...	...	 1882
42·00	...	...	...	 1883
15·50	...	F2	F2	 1884
24·88	...	...	...	 1885
34·47	...	...	...	 1886
33·73	...	...	...	 1887
22·37	...	...	...	 1888
36·92	...	...	...	 1889
31·54	...	...	...	 1890
17·08	...	F2	F2	 1891
33·60	...	...	...	 1892
47·33	...	...	...	 1893
33·06	...	...	...	 1894
30·27	...	...	...	 1895
20·37	...	...	F2	 1896
41·47	...	...	...	 1897
28·33	...	...	...	 1898
35·84	...	...	...	 1899

CSL

TUMKUR

KUNIGAL

January to July

Accepted average	11·07
50 % of average	5·54
65 % of average	7·20
75 % of average	8·30

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1900	8·83	...	...	...
1901	10·55	...	...	...
1902	5·36	F1	F1	F1
1903	12·97	...	...	...
1904	8·77	...	...	...
1905	9·63	...	...	...
1906	13·12	...	...	...
1907	12·06	...	...	...
1908	7·75	...	...	F1
1909	10·12	...	...	...
1910	16·64	...	...	...
1911	9·64	...	...	...
1912	9·65	...	...	...

GSL

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	29·64
50 % of average	14·82
65 % of average	19·27
75 % of average	22·23

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
33·86	...	...	...	1900
28·48	...	...	...	1901
19·47	...	...	F2	1902
39·31	...	...	...	1903
21·52	...	...	F2	1904
20·97	...	...	F2	1905
43·70	...	...	...	1906
19·57	...	...	F2	1907
12·73	F2	F2	F2	1908
35·13	...	...	...	1909
34·27	...	...	...	1910
19·22	...	F2	F2	1911
32·37	...	...	...	1912

CSL

TUMKUR

KORATAGERE

January to July—

Accepted average	8·80
50 % of average	4·40
65 % of average	5·72
75 % of average	6·60

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1889	12·59	...	...	...
1890	8·80	...	...	...
1891	2·60	F1	F1	F1
1892	16·45	...	...	...
1893	10·86	...	...	...
1894	7·10	...	...	...
1895	11·34	...	...	...
1896	4·93	...	F1	F1
1897	5·44	...	F1	F1
1898	8·50	...	...	...
1899	3·46	F1	F1	F1
1900	9·99	...	...	...
1901	10·24	...	...	...
1902	11·46	...	...	...
1903	9·27	...	...	...
1904	12·02	...	...	...
1905	9·35	...	...	...
1906	10·93	...	...	...
1907	15·22	...	...	...
1908	8·64	...	...	...
1909	12·97	...	...	...
1910	12·61	...	...	...
1911	10·75	...	...	...
1912	13·11	...	...	...

DISTRICT.

SUB-TALUK.

January to October—

Accepted average	21·25
50 % of average	10·63
65 % of average	13·81
75 % of average	15·94

Rainfall Jan to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
31·62	...	...	...	 1889
18·85	...	...	...	 1890
8·68	F2	F2	F2	 1891
20·80	...	...	...	 1892
22·01	...	...	...	 1893
18·62	...	...	...	 1894
24·21	...	...	...	 1895
10·65	...	F2	F2	 1896
33·35	...	...	...	 1897
21·80	...	...	...	 1898
18·06	...	...	...	 1899
20·24	...	...	...	 1900
26·62	...	...	...	 1901
23·84	...	...	...	 1902
28·68	...	...	...	 1903
21·73	...	...	...	 1904
18·64	...	...	...	 1905
29·70	...	...	...	 1906
23·66	...	...	...	 1907
14·08	...	...	F2	 1908
27·93	...	...	...	 1909
32·62	...	...	...	 1910
19·99	...	...	...	 1911
27·46	...	...	...	 1912

CSL

TUMKUR

TURUVEKERE

January to July—

Accepted average	9·71
50 % of average	4·86
65 % of average	6·31
75 % of average	7·28

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	8·38	...	...	...
1884	5·63	..	F1	F1
1885	5·40	...	F1	F1
1886	11·88	...	...	...
1887	6·91	...	...	F1
1888	4·95	...	F1	F1
1889	8·21	...	...	...
1890	13·05	...	...	..
1891	8·80	...	...	...
1892	12·15	...	...	...
1893	17·93	...	...	...
1894	11·75	...	...	...
1895	11·35	...	...	...
1896	8·35	...	...	...
1897	6·87	...	...	F1
1898	7·59	...	...	...
1899	7·87	...	...	...
1900	8·82	...	...	...
1901	8·35	...	...	...
1902	8·41	...	...	...
1903	8·95	...	...	...
1904	12·00	...	...	...
1905	10·68	...	...	...
1906	5·72	...	F1	F1

CSL

DISTRICT.

SUB-TALUK.

January to October—

Accepted average	23·71
50 % of average	11·86
65 % of average	15·41
75 % of average	17·78

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
35·93	...	...	..	 1883
8·18	F2	F2	F2	 1884
28·90	...	...	...	 1885
22·80	...	...	...	 1886
19·04	...	...	...	 1887
15·00	...	F2	F2	... 1888
29·11	...	...	...	 1889
20·50	...	...	...	 1890
15·35	...	F2	F2	 1891
19·78	...	...	...	 1892
31·60	...	...	...	 1893
25·62	...	...	...	 1894
29·44	...	...	...	 1895
14·79	...	F2	F2	 1896
26·88	...	...	...	 1897
33·56	...	..	...	 1898
23·27	...	...	...	 1899
25·57	...	...	...	 1900
29·00	...	...	...	 1901
25·83	...	...	...	 1902
28·78	...	...	...	 1903
18·40	...	...	...	 1904
22·93	...	...	...	 1905
27·86	...	...	...	 1906

TUMKUR

TURUVEKERE

January to July—

Accepted average	9 71
50 % of average	4·86
65 % of average	6·31
75 % of average	7·28

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	12·57	...	...	...
1908	8·32	...	...	...
1909	12·69	...	...	...
1910	14·47	...	...	...
1911	12·02	...	...	...
1912	12·24	...	...	...

DISTRICT.

SUB-TALUK—*concld.*

January to October—

Accepted average	23·71
50 % of average	11·86
65 % of average	15·41
75 % of average	17·78

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
18·03	...	...	...	1907
12·08	...	F2	F2	1908
30·96	...	...	...	1909
31·90	...	...	...	1910
22·06	...	...	...	1911
27·37	...	...	...	1912

MYSORE

MYSORE

January to July—

Accepted average	13·68
50 % of average	6·84
65 % of average	8·89
75 % of average	10·26

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	8·94	...	...	F1
1871	10·60	...	...	...
1872	8·97	...	...	F1
1873	5·80	F1	F1	F1
1874	9·82	...	...	F1
1875	6·17	F1	F1	F1
1876	9·69	...	...	F1
1877	9·09	...	...	F1
1878	18·86	...	...	...
1879	16·12	...	...	...
1880	19·78	...	...	...
1881	12·05	...	...	...
1882	21·81	...	...	...
1883	17·04	...	...	...
1884	9·96	...	...	F1
1885	9·36	...	...	F1
1886	14·08	...	...	...
1887	15·40	...	...	...
1888	9·05	...	...	F1
1889	12·89	...	...	...
1890	16·81	...	...	...
1891	13·50	...	...	...
1892	22·41	...	...	...
1893	20·86	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	28·04
50 % of average	14·02
65 % of average	18·23
75 % of average	21·03

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·03	...	...	...	 1870
16·13	...	F2	F2	 1871
18·76	...	...	F2	 1872
21·89	...	...	...	 1873
23·21	...	...	...	 1874
15·72	..	F2	F2	 1875
21·76	...	...	...	 1876
24·89	...	...	...	 1877
31·10	...	..	...	 1878
25·76	...	...	..	 1879
40·23	...	...	...	 1880
21·07	...	...	...	 1881
40·35	...	...	...	 1882
36·68	...	...	...	 1883
22·09	...	...	...	 1884
25·15	...	...	...	 1885
30·80	...	...	...	 1886
34·00	...	...	...	 1887
18·68	...	...	F2	 1888
38·51	...	...	...	 1889
28·59	...	...	...	 1890
24·90	...	...	...	 1891
38·19	...	...	...	 1892
34·94	...	...	...	 1893

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MYSORE

Mysore

January to July—

Accepted average	13·68
50 % of average	6·84
65 % of average	8·89
75 % of average	10·26

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	14·08	...	...	...
1895	16·09	...	...	...
1896	13·73	...	...	...
1897	17·03	...	...	...
1898	7·74	...	F1	F1
1899	7·22	...	F1	F1
1900	8·03	...	F1	F1
1901	7·33	...	F1	F1
1902	14·82	...	...	...
1903	17·75	...	...	...
1904	19·59	...	...	...
1905	10·35	...	...	...
1906	9·56	...	...	F1
1907	11·79	...	...	...
1908	19·13	...	...	...
1909	21·91	...	...	...
1910	16·39	...	...	...
1911	23·16	...	...	...
1912	13·25	...	...	...

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average ... ... 28·04
50 % of average ... ... 14·02
65 % of average ... ... 18·23
75 % of average ... ... 21·03

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
27·60	...	...	...	 1894
35·88	...	...	...	 1895
26·09	...	...	...	 1896
38·50	...	...	...	 1897
27·57	...	...	...	 1898
17·74	...	F2	F2	 1899
24·90	...	...	...	 1900
29·06	...	...	...	 1901
28·25	...	...	...	 1902
41·18	...	...	...	 1903
25·75	...	...	...	 1904
20·28	...	...	F2	 1905
25·04	...	...	...	 1906
21·36	...	...	...	 1907
26·14	...	...	...	 1908
36·95	...	...	...	 1909
41·33	...	...	...	 1910
31·85	...	...	...	 1911
26·06	...	...	...	 1912

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MYSORE

CHAMRAJNAGAR

January to July—

Accepted average	13·92
50 % of average	6·96
65 % of average	9·05
75 % of average	10·44

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	13·22	...	...	...
1884	8·55	...	F1	F1
1885	5·56	F1	F1	F1
1886	10·60	...	...	...
1887	7·00	...	F1	F1
1888	4·08	F1	F1	F1
1889	8·83	...	F1	F1
1890	11·10	...	...	...
1891	5·35	F1	F1	F1
1892	12·10	...	...	...
1893	11·78	...	...	...
1894	9·36	...	...	F1
1895	13·68	...	...	...
1896	10·03	...	...	F1
1897	12·98	...	...	...
1898	16·32	...	...	...
1899	10·15	...	...	F1
1900	12·63	...	...	...
1901	13·33	...	...	...
1902	8·51	...	F1	F1
1903	22·23	...	...	...
1904	7·95	...	F1	F1
1905	13·90	...	...	...
1906	7·88	...	F1	F1

DISTRICT.

TALUK.

January to October—

Accepted average	23·25
50 % of average	11·63
65 % of average	15·11
75 % of average	17·44

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
25·03	...	...	...	1883
17·74	...	...	...	1884
18·96	...	...	...	1885
18·50	...	...	...	1886
16·30	...	...	F2	1887
7·23	F2	F2	F2	1888
23·28	...	...	...	1889
17·76	...	...	...	1890
10·33	F2	F2	F2	1891
21·30	...	...	...	1892
23·89	...	...	...	1893
21·19	...	...	...	1894
25·07	...	...	...	1895
21·95	...	...	...	1896
32·11	...	...	...	1897
35·57	...	...	...	1898
25·45	...	...	...	1899
27·67	...	...	...	1900
30·51	...	...	...	1901
15·88	...	...	F2	1902
30·68	...	...	...	1903
17·28	...	...	F2	1904
24·93	...	...	...	1905
27·36	...	...	...	1906

MYSORE

CHAMRAJNAGAR

anuary to July—

Accepted average	13·92
50 % of average	6·96
65 % of average	9·05
75 % of average	10·44

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	10·33	...	...	F1
1908	12·88	...	...	...
1909	13·21	...	...	...
1910	10·61	..	...	...
1911	13·76	...	...	...
1912	9·99	...	...	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	23·25
50 % of average	11·63
65 % of average	15·11
75 % of average	17·44

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
18·01	...	...	...	1907
25·51	...	...	...	1908
29·75	...	...	...	1909
29·64	...	...	...	1910
24·65	...	...	...	1911
25·18	...	...	...	1912

MYSORE

SERINGAPATAM

January to July—

Accepted average	11·80
50 % of average	5·90
65 % of average	7·67
75 % of average	8·85

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1872	15·17	...	...	...
1873	5·63	F1	F1	F1
1874	9·96	...	...	...
1875	8·44	...	...	F1
1876	9·69	...	...	...
1877	11·21	...	...	...
1878	12·50	...	...	...
1879	14·02	...	...	...
1880	16·35	...	...	...
1881	8·55	...	...	F1
1882	13·62	...	...	...
1883	14·38	...	...	...
1884	6·96	...	F1	F1
1885	10·70	...	...	...
1886	10·69	...	...	...
1887	10·48	...	...	...
1888	5·35	F1	F1	F1
1889	10·48	...	...	...
1890	15·83	...	...	...
1891	10·44	...	...	...
1892	15·16	...	...	...
1893	25·65	...	...	...
1894	12·74	...	...	...
1895	9·79	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	24·94
50 % of average	12·47
65 % of average	16·21
75 % of average	18·70

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
26·93	...	...	...	 1872
21·34	...	...	...	 1873
24·74	...	...	...	 1874
20·56	..	...	...	 1875
18·31	...	...	F2	 1876
28·87	...	...	...	 1877
23·68	...	...	...	 1878
23·51	...	...	...	 1879
31.27	...	...	...	 1880
12·61	...	F2	F2	 1881
32·35	...	...	...	 1882
31·13	...	...	...	 1883
15·45	...	F2	F2	 1884
22·95	...	...	...	 1885
27·06	...	...	...	 1886
24·25	...	...	...	 1887
11·79	F2	F2	F2	 1888
29·11	...	...	...	 1889
27·51	...	...	...	 1890
18·73	...	...	...	 1891
29·24	...	...	...	 1892
44·69	...	...	...	 1893
25·86	...	...	...	 1894
24·94	...	...	...	 1895

MYSORE

SERINGAPATAM

January to July—

Accepted average	11·80
50 % of average	5·90
65 % of average	7·67
75 % of average	8·85

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1896	10·75	...	...	...
1897	11·62	...	...	...
1898	8·69	...	...	F1
1899	12·08	...	...	...
1900	7·87	...	...	F1
1901	10·61	...	...	...
1902	8·68	...	...	F1
1903	14.88	...	...	...
1904	14·32	...	...	...
1905	11·18	...	...	...
1906	6·59	...	F1	F1
1907	14·10	...	...	...
1908	12·67	...	...	...
1909	19·22	...	...	...
1910	13·96	...	...	...
1911	20·51	...	...	...
1912	3·63	F1	F1	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·94
50 % of average	12·47
65 % of average	16·21
75 % of average	18·70

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
22·17	...	...	...	 1896
26·89	...	...	...	 1897
25·46	...	...	...	 1898
22·64	...	...	...	 1899
24·09	...	...	...	 1900
30·60	...	...	...	 1901
17·81	...	...	F2	 1902
40·31	...	...	...	 1903
17·30	...	...	F2	 1904
22·67	...	...	...	 1905
22·53	...	...	...	 1906
22·55	...	...	...	 1907
21·60	...	...	...	 1908
34·54	...	...	...	 1909
30·86	...	...	...	 1910
24·60	...	...	...	 1911
15·46	...	F2	F2	 1912

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MYSORE

HUNSUR

January to July—

Accepted average	15·48
50 % of average	7·74
65 % of average	10·06
75 % of average	11·61

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
... ...	28·47	...	...	...
1872	13·75	...	...	...
1873	9·41	...	F1	F1
1874	16·52	...	...	...
1875	11·21	...	...	F1
1876	11·06	...	...	F1
1877	11·97	...	...	...
1878	8·61	...	F1	F1
1879	11·99	...	...	...
1880	19·07	...	...	...
1881	10·51	...	...	F1
1882	27·61	...	...	...
1883	16·59	...	...	...
1884	10·70	...	...	F1
1885	11·95	...	...	...
1886	15·83	...	...	...
1887	14·34	...	...	...
1888	14·64	...	...	...
1889	14·65	...	...	...
1890	17·77	...	...	...
1891	16·70	...	...	...
1892	17·86	...	...	...
1893	13·54	...	...	...
1894	17·64	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	28·67
50 % of average	14·34
65 % of average	18·63
75 % of average	21·50

Rainfall. Jan. to Oct.	Failures. 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
37·55	...	...	...	1871
27·46	...	...	...	1872
21·42	...	...	F2	1873
25·56	...	...	...	1874
20·76	..	...	F2	1875
18·80	...	...	F2	1876
27·95	...	...	...	1877
21·61	...	...	...	1878
24·75	...	...	...	1879
30·76	...	...	...	1880
17·84	...	F2	F2	1881
45·77	...	...	...	1882
34·32	...	...	...	1883
22·58	...	...	...	1884
22·03	...	...	...	1885
31·11	...	...	...	1886
25·88	...	...	...	1887
23·96	...	...	...	1888
38·45	...	...	...	1889
24·47	...	...	...	1890
22·79	...	...	...	1891
29·05	...	...	...	1892
25·59	...	...	...	1893
27·46	...	...	...	1894

MYSORE

HUNSUR

January to July—

Accepted average	15·48
50 % of average	7·74
65 % of average	10·06
75 % of average	11·61

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1895	11·76	...	...	...
1896	16·25	...	...	...
1897	21·78	...	...	...
1898	9·88	...	F1	F1
1899	11·17	...	...	F1
1900	22·20	...	...	...
1901	10·07	...	...	F1
1902	14·88	...	...	...
1903	18·02	...	...	...
1904	16·30	...	...	...
1905	13·32	...	...	...
1906	10·13	...	...	F1
1907	15·45	...	...	...
1908	17·36	...	...	...
1909	20·01	...	...	...
1910	13·30	...	...	...
1911	26·56	...	...	...
1912	18·57	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	28·67
50 % of average	14·34
65 % of average	18·63
75 % of average	21·50

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
24·09	...	...	...	 1895
28·13	...	...	...	 1896
42·12	...	...	...	 1897
27·28	...	...	...	 1898
24·88	...	...	...	 1899
36·20	...	...	...	 1900
30·33	...	...	...	 1901
24·35	...	...	...	 1902
36·61	...	...	...	 1903
24·46	...	...	...	 1904
22·40	...	...	...	 1905
27·32	...	...	...	 1906
27·68	...	...	...	 1907
26·29	...	...	...	 1908
34·69	...	...	...	 1909
29·14	...	...	...	 1910
33·41	...	...	...	 1911
35·17	...	...	...	 1912

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YEDATORE

January to July—

Accepted average	11·02
50 % of average	5·51
65 % of average	7·16
75 % of average	8·27

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	8·41	...	...	...
1871	0·46	F1	F1	F1
1872	4·25	F1	F1	F1
1873	8·21	...	...	F1
1874	11·36	...	...	...
1875	10·46	...	...	...
1876	1·86	F1	F1	F1
1877	5·01	F1	F1	F1
1878	13·69	...	...	...
1879	12·59	...	...	...
1880	16·83	...	...	...
1881	7·95	...	...	F1
1882	15·10	...	...	...
1883	11·81	...	...	...
1884	8·75	...	...	...
1885	7·68	...	...	F1
1886	17·17	...	...	...
1887	12·99	..	...	...
1888	11·62	...	...	...
1889	11·01	...	...	...
1890	15·85	...	...	...
1891	8·30	...	...	...
1892	16·98	...	...	...
1893	23·35	...	...	...

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DISTRICT.

TALUK.

January to October--

Accepted average	21·90
50 % of average	10·95
65 % of average	14·23
75 % of average	16·43

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
11·41	...	F2	F2	 1870
5·64	F2	F2	F2	 1871
9·10	F2	F2	F2	 1872
12·15	...	F2	F2	 1873
17·74	..	...	...	 1874
14·23	...	...	F2	 1875
4·87	F2	F2	F2	 1876
20·06	...	...	...	 1877
24·44	...	...	...	 1878
23·39	...	...	...	 1879
30·37	...	...	...	 1880
12·25	...	F2	F2	 1881
32·19	...	...	...	 1882
28·68	...	...	...	 1883
21·30	...	...	...	 1884
16·96	...	...	...	 1885
31·00	...	...	...	 1886
27·89	...	...	...	 1887
18·71	...	...	..	 1888
29·45	...	...	...	 1889
22·83	...	...	..	 1890
16·17	...	...	F2	 1891
29·75	...	...	...	 1892
39·29	...	...	..	 1893

MYSORE

YEDATORE

January to July—

Accepted average	11·02
50 % of average	5·51
65 % of average	7·16
75 % of average	8·27

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	9·09	...	...	..
1895	10·32	...	...	...
1896	8·64	...	...	...
1897	15·51	...	...	...
1898	9·46	...	...	...
1899	8·82	...	...	...
1900	7·78	...	...	F1
1901	12·39	...	...	...
1902	8·38	...	...	...
1903	15·77	...	...	...
1904	13·66	...	...	...
1905	7·70	...	..	F1
1906	7·54	..	...	F1
1907	10·88	...	...	...
1908	12·67	...	...	...
1909	13·87	...	...	...
1910	11·63	...	..	...
1911	19·15	...	...	...
1912	9·10	...	...	...

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	21·90
50 % of average	10·95
65 % of average	14·23
75 % of average	16·43

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
20·07	...	...	...	 1894
17·74	...	...	...	 1895
22·23	...	...	...	 1896
35·17	...	...	...	 1897
20·83	...	...	...	 1898
18·69	...	...	...	 1899
18·66	...	...	...	 1900
27·47	...	...	...	 1901
16·69	...	...	...	 1902
33·17	...	...	...	 1903
17·53	...	...	...	 1904
16·30	...	...	F2	 1905
20·92	...	...	...	 1906
21·30	...	...	...	 1907
18·13	...	...	...	 1908
27·66	...	...	...	 1909
26·78	...	...	...	 1910
30·17	...	...	...	 1911
32·70	...	...	...	 1912

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MYSORE

HEGGADDEVANKOTE

January to July—

Accepted average	18·29
50 % of average	9·15
65 % of average	11·39
75 % of average	13·72

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	13·75	...	...	...
1884	6·80	F1	F1	F1
1885	11·37	...	F1	F1
1886	13·00	...	...	F1
1887	8·20	F1	F1	F1
1888	6·96	F1	F1	F1
1889	10·76	...	F1	F1
1890	14·55	...	...	...
1891	18·08	...	...	...
1892	22·98	...	...	...
1893	20·85	...	...	...
1894	17·30	...	...	...
1895	19·49	...	...	...
1896	26·32	...	...	...
1897	23·60	...	...	...
1898	13·64	...	...	F1
1899	13·85	...	...	...
1900	24·28	...	...	...
1901	15·63	...	...	...
1902	24·26	...	...	...
1903	24·29	...	...	...
1904	19·61	...	...	...
1905	16·63	...	...	...
1906	10·06	...	F1	F1

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APPENDIX II

DISTRICT.

TALUK.

January to October—

Accepted average	30·74
50 % of average	15·37
65 % of average	19·98
75 % of average	23·05

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
22·35	...	...	F2	1883
14·27	F2	F2	F2	1884
21·02	...	...	F2	1885
22·36	...	...	F2	1886
20·00	...	...	F2	1887
14·17	F2	F2	F2	1888
37·36	...	...	...	1889
24·44	...	...	...	1890
24·35	...	...	...	1891
26·35	...	...	...	1892
32·13	...	...	...	1893
27·07	...	...	...	1894
37·43	...	...	...	1895
38·12	...	...	...	1896
42·71	...	...	...	1897
26·99	...	...	...	1898
23·35	...	...	...	1899
43·63	...	...	...	1900
35·24	...	...	...	1901
40·24	...	...	...	1902
38·63	...	...	...	1903
24·15	...	...	...	1904
26·69	...	...	...	1905
33·20	...	...	...	1906

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MYSORE

HEGGADDEVANKOTE

January to July—

Accepted average	18·29
50 % of average	9·15
65 % of average	11·39
75 % of average	13·72

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	16·96	...	...	...
1908	25·38	...	...	...
1909	28·13	...	...	...
1910	23·97	...	...	...
1911	29·44	...	...	...
1912	28·71	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	30·74
50 % of average	15·37
65 % of average	19·98
75 % of average	23·05

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
29·07	...	...	...	 1907
35·40	...	...	...	 1908
44·43	...	...	...	 1909
36·65	...	...	...	 1910
34·98	...	...	...	 1911
45·79	...	...	...	 1912

MYSORE

GUNDLUPET

January to July—

Accepted average	11·41
50 % of average	5·71
65 % of average	7·42
75 % of average	8·56

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1877	7·42	...	..	F1
1878	16·67	...	...	...
1879	16·92	...	...	...
1880	1·26	F1	F1	F1
1881	8·45	...	...	F1
1882	18·06	...	.	...
1883	12·13	...	...	...
1884	7·69	...	...	F1
1885	10·10	..	...	...
1886	17·43	...	...	...
1887	7·16	...	F1	F1
1888	8·38	...	...	F1
1889	9·70	...	...	...
1890	12·00	...	...	...
1891	12·46	...	...	...
1892	13·09	...	...	..
1893	13·35	...	...	...
1894	11·01	...	...	...
1895	12·90	...	...	...
1896	10·88	...	...	..
1897	10·64	...	...	...
1898	9·13	...	...	...
1899	5·70	F1	F1	F1
1900	10·37	...	...	...

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TALUK.

January to October—

Accepted average	21·57
50 % of average	10·79
65 % of average	14·02
75 % of average	16·17

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
22·56	...	...	...	 1877
25·43	...	...	...	 1878
26·33	...	...	...	 1879
15·69	...	...	F2	 1880
13·54	...	F2	F2	 1881
32·19	...	...	...	 1882
24·92	...	...	...	 1883
13·45	...	F2	F2	 1884
18·03	...	...	...	 1885
24·49	...	...	...	 1886
20·83	...	...	...	 1887
13·89	...	F2	F2	 1888
22·67	...	...	...	 1889
19·75	...	...	...	 1890
17·94	...	...	...	 1891
19·36	...	...	...	 1892
20·03	...	...	...	 1893
21·64	...	...	...	 1894
22·38	...	...	...	 1895
19·42	...	...	...	 1896
22·41	...	...	...	 1897
23·44	...	...	...	 1898
12·69	...	F2	F2	 1899
23·78	...	...	...	 1900

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MYSORE

GUNDLUPET

January to July—

Accepted average	11·41
50 % of average	5·71
65 % of average	7·42
75 % of average	8·56

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1901	9·54	...	...	...
1902	12·34	...	...	...
1903	18·10	...	...	...
1904	9·70	...	...	...
1905	12·89	...	...	...
1906	8·38	...	...	F1
1907	14·56	...	...	...
1908	10·54	...	...	...
1909	15·34	...	...	...
1910	13·37	...	...	...
1911	21·45	...	...	...
1912	6·63	...	F1	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	21·57
50 % of average	10·79
65 % of average	14·02
75 % of average	16·17

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·24	...	...	...	 1901
22·40	...	...	...	 1902
29·15	...	...	...	 1903
14·04	...	...	F2	 1904
22·57	...	...	...	 1905
28·32	...	...	...	 1906
22·58	...	...	...	 1907
19·19	...	...	...	 1908
28·15	...	...	...	 1909
31·95	...	...	...	 1910
29·15	...	...	...	 1911
21·02	...	...	...	 1912

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NANJANGUD

January to July—

Accepted average	12·67
50 % of average	6·34
65 % of average	8·24
75 % of average	9·51

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	13·56	...	...	...
1884	5·51	F1	F1	F1
1885	11·05	...	...	...
1886	13·22	...	...	...
1887	10·92	...	...	...
1888	6·15	F1	F1	F1
1889	7·27	...	F1	F1
1890	14·15	...	...	...
1891	9·09	...	...	F1
1892	16·07		...	...
1893	17·07	...	...	...
1894	16·49	...	...	...
1895	14·80	...	...	...
1896	8·04	...	F1	F1
1897	14·49	...	...	...
1898	10·98	...	...	...
1899	11·42	...	...	...
1900	10·29	...	...	...
1901	11·78	...	...	...
1902	15·11	...	...	...
1903	15·52	..	...	...
1904	15·98	...	...	...
1905	14·07		...	..
1906	6·30	F1	F1	F1

APPENDIX II

DISTRICT.

TALUK.

January to October—

Accepted average	24·81
50 % of average	12·41
65 % of average	16·13
75 % of average	18·61

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis		Year
28·36	...	...	...	... ...	1883
11·02	F2	F2	F2	... ...	1884
25·50	...	...	...	... ...	1885
26·33	...	...	...	... ...	1886
26·37	...	...	...	... ...	1887
13·26	...	F2	F2	... ...	1888
26·06	...	...	...	... ...	1889
22·88	...	...	...	... ...	1890
14·42	..	F2	F2	... ...	1891
24·25	..	...	...	... ...	1892
29·31	...	...	...	... ...	1893
30·94	...	...	...	... ...	1894
27·60	...	...	...	... ...	1895
15·07	...	F2	F2	... ...	1896
34·45	...	...	...	... ...	1897
26·12	...	...	...	... ...	1898
23·66	...	...	...	... ...	1899
26·06	...	...	...	... ...	1900
32·02	...	...	...	... ...	1901
22·82	...	...	...	... ...	1902
30·02	...	...	...	... ...	1903
21·85	...	...	...	... ...	1904
21·93	...	...	...	... ...	1905
18·17	...	.	F2	... ...	1906

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MYSORE

NANJANGUD

January to July—

Accepted average	12·67
50 % of average	6·34
65 % of average	8·24
75 % of average	9·51

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	14·13	...	...	...
1908	20·03	...	...	...
1909	14·92	...	...	...
1910	10·22	...	...	...
1911	20·77	...	...	...
1912	11·11	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·81
50 % of average	12·41
65 % of average	16·13
75 % of average	18·61

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
26·10	...	...	...	 1907
28·42	...	...	...	 1908
30·10	...	...	...	 1909
30·07	...	...	...	 1910
27·99	...	...	...	 1911
23·93	...	...	...	 1912

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T.-NARSIPUR

January to July—

Accepted average	11·83
50 % of average	5·92
65 % of average	7·68
75 % of average	8·88

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	11·97	...	...	...
1871	14·97	...	...	...
1872	13·92	...	...	...
1873	6·70	...	F1	F1
1874	Not available			
1875	3·90	F1	F1	F1
1876	8·21	...	...	F1
1877	4·18	F1	F1	F1
1878	11·66	...	...	...
1879	4·68	F1	F1	F1
1880	12·40	...	...	...
1881	7·57	...	F1	F1
1882	14·56	...	...	...
1883	13·42	...	...	...
1884	9·18	...	...	...
1885	9·67	...	...	...
1886	14·66	...	...	...
1887	11·86	...	...	...
1888	9·03	...	...	...
1889	11·39	...	...	...
1890	15·56	...	...	...
1891	13·45	...	...	...
1892	14·31	...	...	...
1893	13·08	...	...	...

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DISTRICT.

TALUK.

January to October—

Accepted average	25·75
50 % of average	12·88
65 % of average	16·74
75 % of average	19·31

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
25·27	...	...	...	 1870
24·67	...	...	...	 1871
27·92	...	...	...	 1872
19·43	...	..	...	 1873
Not available				 1874
17·55	...	...	F2	 1875
19·11	...	...	F2	 1876
26·10	...	...	...	 1877
28·40	...	...	...	 1878
21·42	..	...	...	 1879
25·92	...	...	..	 1880
16·93	...	...	F2	 1881
28·84	...	...	...	 1882
29·95	...	...	...	 1883
16·10	...	F2	F2	 1884
23·38	...	...	...	 1885
32·00	...	...	...	 1886
33·30	...	...	...	 1887
15·27	...	F2	F2	 1888
29·18	...	..	...	 1889
27·72	...	...	...	 1890
20·13	...	...	...	 1891
25·53	...	...	...	 1892
24·51	...	...	...	 1893

GSL

MYSORE

T.-NARSIPUR

January to July—

Accepted average ... ... 11·83
50 % of average ... ... 5·92
65 % of average ... ... 7·68
75 % of average ... ... 8·88

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	9·92	...	...	...
1895	12·41	...	...	...
1896	9·61	...	...	...
1897	14·61	...	...	...
1898	6·89	...	F1	F1
1899	7·48	...	F1	F1
1900	7·33	...	F1	F1
1901	11·72	...	...	...
1902	12·14	...	...	..
1903	19·76	...	...	...
1904	13·35	...	...	...
1905	12·75	...	...	...
1906	6·59	...	F1	F1
1907	10·84	...	...	...
1908	18·20	..	...	...
1909	11·85	...	...	..
1910	11·16	...	...	..
1911	19·88	...	...	...
1912	8·19	...	...	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	25·75
50 % of average	12·88
65 % of average	16·74
75 % of average	19·31

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·17	...	...	...	 1894
24·73	...	...	...	 1895
18·91	...	...	F2	 1896
24·78	...	...	...	 1897
22·21	...	...	...	 1898
18·05	...	...	F2	 1899
22·21	...	...	...	 1900
24·23	...	...	...	 1901
20·32	...	...	...	 1902
38·10	...	...	...	 1903
22·56	...	...	...	 1904
22·78	...	...	...	 1905
20·86	...	...	...	 1906
26·31	...	...	...	 1907
30·22	...	...	...	 1908
20·65	...	...	...	 1909
31·85	...	...	...	 1910
36·93	...	...	...	 1911
22·12	...	...	...	 1912

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MYSORE

MALVALLI

January to July—

Accepted average	9·67
50 % of average	4·84
65 % of average	6·28
75 % of average	7·25

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	14·77	...	...	...
1871	7·21	...	...	F1
1872	6·87	...	...	F1
1873	2·02	F1	F1	F1
1874	6·75	...	...	F1
1875	Not available			
1876	7·54	...	...	...
1877	6·75	...	...	F1
1878	9·09	...	...	...
1879	13·35	...	...	...
1880	5·90	...	F1	F1
1881	5·14	...	F1	F1
1882	10·72	...	...	...
1883	7·73	...	...	...
1884	Not available			
1885	Not available			
1886	2·28	F1	F1	F1
1887	6·84	...	...	F1
1888	6·70	...	...	F1
1889	6·37	...	...	F1
1890	7·27	...	...	...
1891	6·10	...	F1	F1
1892	18·86	...	...	...
1893	20·20	...	...	...

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DISTRICT.

TALUK.

January to October—

Accepted average	24·23
50 % of average	12·12
65 % of average	15·74
75 % of average	18·17

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
36·61	...	...	...	 1870
15·56	...	F2	F2	 1871
17·07	...	...	F2	 1872
9·12	F2	F2	F2	 1873
16·52	...	...	F2	 1874
Not available				 1875
16·69	...	...	F2	 1876
23·66	...	...	...	 1877
19·54	...	...	...	 1878
23·78	...	...	...	 1879
14·08	...	F2	F2	 1880
12·32	...	F2	F2	 1881
28·15	...	...	...	 1882
26·08	..	...	...	 1883
Not available				 1884
Not available				 1885
21·41	...	...	..	 1886
23·29	...	...	...	 1887
11·68	F2	F2	F2	 1888
24·42	...	...	...	 1889
20·84	...	...	...	 1890
11·37	F2	F2	F2	 1891
26·43	...	...	...	 1892
38·88	...	...	...	 1893

MYSORE

MALVALLI

January to July—

Accepted average	9·67
50 % of average	4·84
65 % of average	6·28
75 % of average	7·25

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	7·57	...	...	...
1895	13·45	...	...	...
1896	7·32	...	...	...
1897	9·80	...	...	...
1898	9·71	...	...	...
1899	6·69	...	...	F1
1900	10·67	...	...	...
1901	9·56	...	...	...
1902	7·35	...	...	...
1903	12·08	...	...	...
1904	15·89	...	...	...
1905	8·61	...	...	...
1906	5·98	...	F1	F1
1907	11·68	...	...	...
1908	17·33	...	...	...
1909	13·59	...	...	...
1910	13·25	...	...	...
1911	12·05	...	...	...
1912	5·69	...	F1	F1

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·23
50 % of average	12·12
65 % of average	15·74
75 % of average	18·17

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
20·22	...	...	...	1894
26·45	...	...	...	1895
14·29	...	F2	F2	1896
29·50	...	...	...	1897
25·28	...	...	...	1898
19·17	...	...	...	1899
30·82	...	...	...	1900
27·99	...	...	...	1901
19·24	...	...	...	1902
37·93	...	...	...	1903
21·36	...	...	...	1904
18·91	...	...	...	1905
29·39	...	...	...	1906
22·14	...	...	...	1907
28·20	...	...	...	1908
40·43	...	...	...	1909
25·88	...	...	...	1910
22·29	...	...	...	1911
19·21	...	...	...	1912

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MANDYA

January to July—

Accepted average	10·72
50 % of average	5·36
65 % of average	6·97
75 % of average	8·04

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	12·47	...	...	...
1884	4·56	F1	F1	F1
1885	6·73	...	F1	F1
1886	13·27	...	...	...
1887	8·07	...	...	...
1888	7·46	...	...	F1
1889	7·72	...	...	F1
1890	11·93	...	...	...
1891	14·41	...	...	...
1892	12·33	...	...	...
1893	14·77	...	...	...
1894	6·55	...	F1	F1
1895	11·73	...	...	...
1896	10·24	...	...	...
1897	11·13	...	...	...
1898	13·73	...	...	...
1899	5·62	...	F1	F1
1900	3·36	F1	F1	F1
1901	9·79	...	...	...
1902	11·16	...	...	...
1903	11·26	...	...	...
1904	17·72	...	...	...
1905	9·98	...	...	...
1906	6·11	...	F1	F1

DISTRICT.

TALUK.

January to October—

Accepted average ... ... 25·66
50 % of average ... ... 12·83
65 % of average ... ... 16·68
75 % of average ... ... 19·25

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
35·03	...	...	...	1883
12·25	F2	F2	F2	1884
24·82	...	...	...	1885
29·52	...	...	...	1886
31·24	...	...	...	1887
21·41	...	...	...	1888
33·52	...	...	...	1889
28·79	...	...	...	1890
21·56	...	...	...	1891
21·86	...	...	...	1892
27·64	...	...	...	1893
22·60	...	...	...	1894
25·59	...	...	...	1895
17·90	...	...	F2	1896
34·46	...	...	...	1897
33·04	...	...	...	1898
19·56	...	...	...	1899
19·93	...	...	...	1900
26·93	...	...	...	1901
20·47	...	...	...	1902
31·84	...	...	...	1903
22·44	...	...	...	1904
18·40	...	...	F2	1905
26·00	...	...	...	1906

MYSORE

MANDYA

January to July—

Accepted average	10·72
50 % of average	5·36
65 % of average	6·97
75 % of average	8·04

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	17·89	...	...	...
1908	12·90	...	...	...
1909	18·81	...	...	...
1910	9·94	...	...	...
1911	16·37	...	...	...
1912	3·98	F1	F1	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	25·66
50 % of average	12·83
65 % of average	16·68
75 % of average	19·25

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
24·02	...	...	...	 1907
20·21	...	...	...	 1908
46·67	...	...	...	 1909
29·29	...	...	...	 1910
24·67	...	...	...	 1911
18·36	...	...	F2	 1912

MYSORE

KRISHNARAJPETE

January to July—

Accepted average	11·74
50 % of average	5·87
65 % of average	7·65
75 % of average	8·81

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1871	3·45	F1	F1	F1
1872	7·53	..	F1	F1
1873	10·77	...	...	...
1874	10·45	...	...	...
1875	4·92	F1	F1	F1
1876	Not available			
1877	10·28	...	...	..
1878	12·35	...	...	...
1879	10·15	...	...	...
1880	17·35	...	...	...
1881	7·27	...	F1	F1
1882	15·40	..	...	...
1883	13·40	...	...	...
1884	10·27	...	...	...
1885	8·73	...	...	F1
1886	15·65	...	..	...
1887	13·45	...	...	...
1888	7·90	...	...	F1
1889	9·45	...	...	...
1890	15·49	...	...	...
1891	7·88	...	...	F1
1892	14·41	...	...	...
1893	17·57	...	...	...
1894	9·32	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	24·47
50 % of average	12·24
65 % of average	15·91
75 % of average	18·35

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
7·75	F2	F2	F2	1871
12·25	...	F2	F2	1872
19·01	...	...	...	1873
20·85	...	...	...	1874
9·57	F2	F2	F2	1875
Not available				1876
27·28	...	...	...	1877
26·52	...	...	...	1878
14·72	...	F2	F2	1879
35·29	...	...	...	1880
12·41	...	F2	F2	1881
29·50	...	...	...	1882
37·38	...	...	...	1883
17·65	...	...	F2	1884
22·06	...	...	...	1885
32·75	...	...	...	1886
25·14	...	...	...	1887
20·11	...	...	...	1888
14·95	...	F2	F2	1889
31·59	...	...	...	1890
14·63	...	F2	F2	1891
22·04	...	...	...	1892
35·96	...	...	...	1893
18·94	...	...	...	1894

MYSORE

KRISHNARAJPETE

January to July—

Accepted average	11·74
50 % of average	5·87
65 % of average	7·65
75 % of average	8·81

Year			Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1895	...	...	9·89	...	...	...
1896	...	...	10·10	...	...	...
1897	...	...	13·04	...	...	...
1898	...	...	10·97	...	...	...
1899	...	...	6·53	...	F1	F1
1900	...	...	8·26	...	...	F1
1901	...	...	11·25	...	...	...
1902	...	..	13·80	...	...	...
1903	...	...	13·19	...	...	...
1904	...	...	18·59	...	...	...
1905	...	..	11·44	...	...	...
1906	...	...	8·55	...	...	F1
1907	...	..	12·40	...	..	...
1908	...	...	13·08	...	...	...
1909	...	...	14·77	...	...	...
1910	...	...	18·92	...	...	...
1911	...	...	19·44	...	...	...
1912	...	...	13·78	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·47
50 % of average	12·24
65 % of average	15·91
75 % of average	18·35

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·33	...	...	...	 1895
17·74	...	...	F2	 1896
33·62	...	...	...	 1897
41·10	...	...	...	 1898
19·19	...	...	F2	 1899
24·44	...	...	...	 1900
32·44	...	...	...	 1901
25·11	...	...	...	 1902
28·17	...	...	...	 1903
31·39	...	...	...	 1904
23·79	...	...	...	 1905
27·65	...	...	...	 1906
23·55	...	...	...	 1907
19·02	...	...	...	 1908
29·76	...	...	...	 1909
35·27	...	...	...	 1910
28·82	...	...	...	 1911
30·63	...	...	...	 1912

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MYSORE

NAGAMANGALA

January to July—

Accepted average	9·41
50 % of average	4·71
65 % of average	6·11
75 % of average	7·06

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1874	11·78	...	...	...
1875	3·08	F1	F1	F1
1876	Not available			
1877	10·42	...	...	...
1878	6·56	...	..	F1
1879	7·20	...	...	...
1880	13·12	...	...	...
1881	4·50	F1	F1	F1
1882	7·33	...	...	...
1883	7·74	...	...	...
1884	4·74	...	F1	F1
1885	11·15	...	...	...
1886	11·37	...	...	...
1887	9·45	...	...	..
1888	6·50	...	...	F1
1889	8·20	...	...	...
1890	12·45	..	...	...
1891	11·20	...	...	...
1892	12·81	...	...	...
1893	20·77	...	...	...
1894	10·72	...	...	...
1895	10·65	...	...	...
1896	9·22	...	...	...
1897	7·06	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	24·35
50 % of average	12·18
65 % of average	15·82
75 % of average	18·27

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
29·05	...	...	...	1874
11·62	F2	F2	F2	1875
Not available				1876
33·72	...	...	...	1877
13·98	...	F2	F2	1878
37·10	...	...	...	1879
36·00	...	...	...	1880
14·17	...	F2	F2	1881
21·54	...	...	...	1882
25·64	...	...	...	1883
15·56	...	F2	F2	1884
24·82	...	...	...	1885
28·92	...	...	...	1886
23·95	...	...	...	1887
13·92	...	F2	F2	1888
38·10	...	...	...	1889
27·03	...	...	...	1890
19·35	...	...	...	1891
20·77	...	...	...	1892
39·62	...	...	...	1893
24.62	...	...	...	1894
29·63	...	...	...	1895
19·85	...	...	...	1896
26·19	...	...	...	1897

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MYSORE

NAGAMANGALA

January to July—

Accepted average	9·41
50 % of average	4·71
65 % of average	6·11
75 % of average	7·06

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1898	12·00	...	...	...
1899	7·32	...	...	...
1900	5·31	...	F1	F1
1901	13·85	...	...	...
1902	7·23	...	...	...
1903	11·96	...	...	...
1904	11·27	...	...	...
1905	11·08	...	...	...
1906	7·33	...	...	...
1907	8·93	...	...	...
1908	8·50	...	...	...
1909	13·53	...	...	...
1910	10·76	...	...	...
1911	11·00	...	...	...
1912	7·23	...	...	...

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·35
50 % of average	12·18
65 % of average	15·82
75 % of average	18·27

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
37·12	...	...	...	 1898
23·95	...	...	...	 1899
23·97	...	...	...	 1900
30·03	...	...	...	 1901
20·22	...	...	...	 1902
34·76	...	...	...	 1903
14·97	...	F2	F2	 1904
20·90	...	...	...	 1905
27·03	...	...	...	 1906
17·62	...	...	F2	 1907
16·17	...	...	F2	 1908
33·44	...	...	...	 1909
27·49	...	...	...	 1910
18·55	...	...	...	 1911
29·40	...	...	...	 1912

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January to July—

Accepted average	16·59
50 % of average	8·30
65 % of average	10·78
75 % of average	12·45

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1871	26·22	...	...	...
1872	12·02	...	...	F1
1873	27·59	...	...	...
1874	9·24	...	F1	F1
1875	17·53	...	...	...
1876	11·94	...	...	F1
1877	11·55	...	...	F1
1878	12·85	...	...	...
1879	23·60	...	...	...
1880	12·78	...	...	...
1881	1·91	F1	F1	F1
1882	26·19	...	...	...
1883	24·00	...	...	...
1884	9·26	...	F1	F1
1885	15·41	...	..	...
1886	18·79	..	...	...
1887	16·60	...	...	...
1888	12·42	...	...	F1
1889	12·66	...	...	...
1890	14·22	...	...	...
1891	21·76	...	...	...
1892	20·80	...	...	...
1893	16·57	...	...	...
1894	19·40		...	...

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TALUK.

January to October—

Accepted average	29·69
50 % of average	14·85
65 % of average	19·30
75 % of average	22·26

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
36·63	...	...	...	 1871
12·02	F2	F2	F2	 1872
35·88	...	...	...	 1873
14·40	F2	F2	F2	 1874
23·66	...	...	...	 1875
14·28	F2	F2	F2	 1876
36·22	...	...	...	 1877
27·17	...	...	...	 1878
28·32	...	...	...	 1879
23·58	...	...	...	 1880
4·22	F2	F2	F2	 1881
39·58	...	...	...	 1882
45·79	...	...	...	 1883
22·10	...	...	F2	 1884
28·21	...	...	...	 1885
35·18	...	...	...	 1886
31·84	...	...	...	 1887
23·04	...	...	...	 1888
26·83	...	...	...	 1889
30·65	...	...	...	 1890
33·28	...	...	...	 1891
29·58	...	...	...	 1892
27·42	...	...	...	 1893
33·57	...	...	...	 1894

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HASSAN

January to July—

Accepted average	16·59
50 % of average	8.30
65 % of average	10·78
75 % of average	12·45

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1895	14·20	...	...	...
1896	23·48	...	...	...
1897	15·50	...	...	...
1898	13·60	...	...	...
1899	15·11	...	...	...
1900	19·52	...	...	...
1901	13·37	...	...	...
1902	17·03	...	...	...
1903	26·02	...	...	...
1904	18·36	...	...	...
1905	11·74	...	...	F1
1906	9·06	...	F1	F1
1907	16·92	...	...	...
1908	14·72	...	...	...
1909	22·41	...	...	...
1910	18·10	...	...	...
1911	17·41	...	...	...
1912	14·93	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	29·69
50 % of average	14·85
65 % of average	19·30
75 % of average	22·26

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
26·86	...	...	...	 1895
35·38	...	...	...	 1896
35·49	...	...	...	 1897
32·64	...	...	...	 1898
25·38	...	...	...	 1899
41·64	...	...	...	 1900
25·49	...	...	...	 1901
34·27	...	...	...	 1902
40·65	...	...	...	 1903
30·46	...	...	...	 1904
23·77	...	...	...	 1905
36·44	...	...	...	 1906
30·44	...	...	...	 1907
20·08	...	...	F2	 1908
38·05	...	...	...	 1909
36·51	...	...	...	 1910
31·27	...	...	...	 1911
39·00	...	...	...	 1912

HASSAN

MANJARABAD

January to July—

Accepted average	55·09
50 % of average	27·55
65 % of average	35·80
75 % of average	41·32

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	44·29	...	...	...
1887	57·69	...	...	...
1888	54·85	...	...	...
1889	36·78	...	...	F1
1890	36·28	...	...	F1
1891	54·80	...	...	...
1892	63·51	...	...	...
1893	48·51	...	...	...
1894	37·86	...	...	F1
1895	51·68	...	...	...
1896	102·62	...	...	...
1897	57·04	...	...	...
1898	52·57	...	...	...
1899	42·08	...	...	...
1900	75·12	...	...	...
1901	55·43	...	...	...
1902	46·14	...	...	...
1903	61·63	...	...	...
1904	64·37	...	...	...
1905	45·33	...	...	...
1906	46·18	...	...	...
1907	51·30	...	...	...
1908	52·30	...	...	...
1909	70·10	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	83·91
50 % of average	41·96
65 % of average	54·54
75 % of average	62·93

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
67·19	...	...	...	 1886
81 00	...	...	...	 1887
75·05	...	...	...	 1888
78·89	...	...	...	 1889
53·49	...	F2	F2	 1890
84·16	..	...	...	 1891
88·09	...	...	...	 1892
84·85	...	...	...	 1893
60·43	...	...	F2	 1894
71·84	...	...	...	 1895
133·91	...	...	...	 1896
101·75	...	...	...	 1897
85·69	..	..	...	 1898
58·94	..	...	F2	 1899
121·24	...	...	...	 1900
87·60	...	..	.	 1901
71·59	...	...	...	 1902
88·92	...	...	...	 1903
88·13	..	...	...	 1904
64·59	...	...	...	 1905
78 11	...	...	..	 1906
103·09	...	...	...	 1907
73·73	...	...	..	 1908
91·36	...	...	...	 1909

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HASSAN

MANJARABAD

January to July—

Accepted average	55·09
50 % of average	27·55
65 % of average	35·80
75 % of average	41·32

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1910	51·82	...	...	...
1911	75·72	...	...	...
1912	65·54	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	83·91
50 % of average	41·96
65 % of average	54·54
75 % of average	62·93

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
92·09	...	...	...	 1910
95·82	...	...	...	 1911
98·82	...	...	...	 1912

CSL

HASSAN

ARKALGUD

January to July—

Accepted average	16·48
50 % of average	8·24
65 % of average	10·71
75 % of average	12·36

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	13·58	...	...	...
1887	14·09	...	...	...
1888	10·42	...	F1	F1
1889	10·18	...	F1	F1
1890	13·71	...	...	...
1891	20·78	...	...	...
1892	19·59	...	...	...
1893	16·79	...	...	...
1894	16·28	...	...	...
1895	13·93	...	...	...
1896	21·98	...	...	...
1897	17·67	...	...	...
1898	16·93	...	...	...
1899	14·16	...	...	...
1900	20·33	...	...	...
1901	15·79	...	...	...
1902	17·14	...	...	...
1903	27·47	...	...	...
1904	23·70	...	...	...
1905	20·18	...	...	...
1906	15·73	...	...	...
1907	16·48	...	...	...
1908	18·97	...	...	...
1909	22·05	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	27·53
50 % of average	13·77
65 % of average	17·89
75 % of average	20·65

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
24·48	...	...	...	 1886
23·84	...	...	...	 1887
19·16	...	...	F2	 1888
24·08	...	...	...	 1889
25·08	...	...	...	 1890
30·99	...	...	...	 1891
28·83	...	...	...	 1892
31·58	...	...	...	 1893
30·22	...	...	...	 1894
22·61	...	...	...	 1895
32·60	...	...	...	 1896
36·87	...	...	...	 1897
32·20	...	...	...	 1898
22·76	...	...	...	 1899
32·92	...	...	...	 1900
33·03	...	...	...	 1901
30·59	...	...	...	 1902
44·77	...	...	...	 1903
34·10	..	...	...	 1904
34·08	...	...	...	 1905
31·44	...	...	...	 1906
32·41	...	...	...	 1907
27·62	...	...	...	 1908
33·16	...	...	...	 1909

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HASSAN

ARKALGUD

January to July—

Accepted average	16·48
50 % of average	8·24
65 % of average	10·71
75 % of average	12·36

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1910	17·98	...	...	...
1911	28·06	...	...	...
1912	25·00	...	...	...

GSL

DISTRICT.

TALUK—*concld.*

January to October

Accepted average	27·58
50 % of average	13·77
65 % of average	17·89
75 % of average	20·65

Rainfall Jan. to Oct.	Failures ·50 % basis	Failures 65 % basis	Failures 75 % basis	Year
34·09	...	...	...	 1910
39·54	..	...	...	 1911
43·71	...	...	...	 1912

CSL

HASSAN

BELUR

January to July—

Accepted average	21·59
50 % of average	10·80
65 % of average	14·03
75 % of average	16·20

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	15·47	...	...	F1
1887	21·46	...	...	...
1888	11·10	...	F1	F1
1889	10·25	F1	F1	F1
1890	16·60	...	...	...
1891	18·97	...	...	...
1892	16·21	...	...	...
1893	23·50	...	...	...
1894	19·77	...	...	...
1895	18·56	...	...	...
1896	34·88	...	...	...
1897	21·73	...	...	...
1898	14·17	...	...	F1
1899	18·44	...	...	...
1900	25·40	...	...	...
1901	15·32	...	...	F1
1902	32·56	..	...	...
1903	29·27	...	...	...
1904	24·82	...	...	...
1905	16·35	...	...	...
1906	15·44	...	...	F1
1907	21·53	...	...	...
1908	18·76	...	...	...
1909	31·82	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	35·29
50 % of average	17·65
65 % of average	22·94
75 % of average	26·47

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
25·78	...	...	F2	 1886
33·31	...	...	...	 1887
23·57	...	...	F2	 1888
24·35	...	...	F2	 1889
22·66	...	F2	F2	 1890
28·85	...	...	...	 1891
26·01	...	...	F2	 1892
40·83	...	...	...	 1893
33·16	...	...	...	 1894
29·75	...	...	...	 1895
44·88	...	...	...	 1896
43.22	...	...	...	 1897
33·49	...	...	...	 1898
33·88	...	...	...	 1899
52·12	...	...	..	 1900
27·90	...	...	...	 1901
44·41	...	...	...	 1902
43·59	..	...	...	 1903
34·15	...	...	...	 1904
31·01	...	...	...	 1905
30·93	...	...	...	 1906
38·21	...	...	...	 1907
24·12	...	...	F2	 1908
41·27	...	...	...	 1909

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HASSAN

BELUR

January to July—

Accepted average	21·59
50 % of average	10·80
65 % of average	14·03
75 % of average	16·20

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1910	26·48	...	...	...
1911	27·12	...	...	...
1912	36·60	...	...	...

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	35·29
50 % of average	17·65
65 % of average	22·94
75 % of average	26·47

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
48·22	...	...	...	 1910
37·15	...	...	...	 1911
56·00	...	...	...	 1912

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HASSAN

CHANNARAYAPATNA

January to July—

Accepted average	10·16
50 % of average	5·08
65 % of average	6·60
75 % of average	7·62

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	11·51	...	...	...
1887	5·59	...	F1	F1
1888	5·04	F1	F1	F1
1889	9·01	...	...	...
1890	8·66	...	...	...
1891	7·66	...	...	...
1892	15·18	...	...	...
1893	19·33	...	...	...
1894	10·90	...	...	...
1895	11·89	...	...	...
1896	10·82	...	...	...
1897	13·08	...	...	...
1898	11·11	...	...	...
1899	6·80	...	...	F1
1900	8·20	...	...	...
1901	12·14	...	...	...
1902	8·65	...	...	...
1903	15·98	...	...	...
1904	10·07	...	...	...
1905	8·68	...	...	...
1906	8·10	...	...	...
1907	8·22	...	...	...
1908	10·52	...	...	...
1909	17·62	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	21·12
50 % of average	10·56
65 % of average	13·72
75 % of average	15·84

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·42	...	...	...	 1886
10·52	F2	F2	F2	 1887
12·95	...	F2	F2	 1888
21·52	...	...	...	 1889
23·06	...	...	...	 1890
14·67	...	...	F2	 1891
21·95	...	...	...	 1892
28·13	...	...	...	 1893
22·65	...	...	...	 1894
23·53	...	...	...	 1895
14·19	...	...	F2	 1896
28·26	...	...	...	 1897
29·85	...	...	...	 1898
17·05	...	...	...	 1899
26·70	...	...	...	 1900
23·05	...	...	...	 1901
18·29	...	...	...	 1902
33·85	...	...	...	 1903
16·84	...	...	...	 1904
18·35	...	...	...	 1905
28·17	...	...	...	 1906
18·23	...	...	...	 1907
14·72	...	...	F2	 1908
30·09	...	...	...	 1909

HASSAN

CHANNARAYAPATNA

January to July—

Accepted average	10·16
50 % of average	5·08
65 % of average	6·60
75 % of average	7·62

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % bāsis	Failures 75 % basis
1910	16·46	...	...	...
1911	16·56	...	...	...
1912	10·73	..	...	...

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	21·12
50 % of average	10·56
65 % of avarage	13·72
75 % of average	15·84

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
31·88	..	...	...	 1910
30·20	...	...	...	 1911
31·14	...	...	...	 1912

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HASSAN

ARSIKERE

January to July—

Accepted average	9·77
50 % of average	4·89
65 % of average	6·35
75 % of average	7·33

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	9·70	...	...	...
1887	9·60	...	...	...
1888	12·33	...	...	...
1889	11·15	...	...	...
1890	12·19	...	...	...
1891	6·74	...	...	F1
1892	11·22	...	...	...
1893	17·77	...	...	...
1894	7·59	...	...	...
1895	14·87	...	...	...
1896	10·51	...	...	...
1897	10·17	...	...	...
1898	4·88	F1	F1	F1
1899	8·11	...	...	...
1900	12·50	...	...	...
1901	7·39	...	...	...
1902	9·96	...	...	...
1903	12·14	...	...	...
1904	18·50	...	...	...
1905	12·06	...	...	...
1906	5·61	...	F1	F1
1907	7·65	...	...	...
1908	7·24	...	...	F1
1909	15·17	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	22·75
50 % of average	11·38
65 % of average	14·78
75 % of average	17·07

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·64	...	...	...	 1886
26·55	...	...	...	 1887
23·04	...	...	...	 1888
27·91	...	...	...	 1889
17·89	...	...	...	 1890
16·62	...	...	F2	 1891
18·14	...	...	...	 1892
26·63	...	...	...	 1893
15·74	...	...	F2	 1894
28·92	...	...	...	 1895
17·50	...	...	...	 1896
26·45	...	...	...	 1897
23·21	...	...	...	 1898
21·69	...	...	...	 1899
28·47	...	...	...	 1900
16.99	...	...	F2	 1901
25·28	...	...	...	 1902
27·84	...	...	...	 1903
27·79	...	...	...	 1904
24·55	...	...	...	 1905
31·93	...	...	...	 1906
14·61	...	F2	F2	 1907
11·31	F2	F2	F2	 1908
31·35	...	...	...	 1909

HASSAN

ARSIKERE

January to July—

Accepted average	9·77
50 % of average	4·89
65 % of average	6·35
75 % of average	7·33

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1910	11·30	...	...	...
1911	12·94	...	...	...
1912	13·31	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average ... ... 22·75
50 % of average ... ... 11·38
65 % of average ... ... 14·78
75 % of average ... ... 17·07

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·91	...	...	...	 1910
24·39	...	...	...	 1911
29·04	...	...	...	 1912

CSL

HASSAN

HOLE-NARSIPUR

January to July—

Accepted average	12·18
50 % of average	6·09
65 % of average	7·91
75 % of average	9·14

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	13·57	...	...	...
1887	11·96	..	...	...
1888	7·54	...	F1	F1
1889	8·33	...	...	F1
1890	15·32	...	...	...
1891	8·32	...	..	F1
1892	13·61	...	...	...
1893	18·14	...	...	...
1894	8·57	...	...	F1
1895	12·44	...	...	...
1896	11·68	...	...	...
1897 ...	13·13	...	...	...
1898	7·89	...	F1	F1
1899	8·72	...	...	F1
1900	12·12	...	...	...
1901	8·70	...	...	F1
1902	12·57	...	...	...
1903	23·75	...	...	...
1904	14·56	...	...	..
1905	14·95	...	...	..
1906	10·99	...	...	...
1907	11·47	...	...	...
1908	17·64	...	...	...
1909	16·07	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	24·05
50 % of average	12·03
65 % of average	15·63
75 % of average	13·04

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
24·95	...	...	...	1886
25·50	...	...	...	1887
21·55	...	...	...	1888
26·56	...	...	...	1889
25·88	...	...	...	1890
15·08	...	F2	F2	1891
19·88	...	...	...	1892
31·72	...	...	...	1893
21·90	...	...	...	1894
25·45	...	...	...	1895
21·42	...	...	...	1896
29·42	...	...	...	1897
26·29	...	...	...	1898
16·56	...	...	F2	1899
24·01	...	...	...	1900
22·46	...	...	...	1901
22·00	...	...	...	1902
36·33	...	...	...	1903
26·54	...	...	...	1904
23·50	...	...	...	1905
28·44	...	...	...	1906
24·55	...	...	...	1907
22·40	...	...	...	1908
25·81	...	...	...	1909

HASSAN

HOLE-NARSIPUR

January to July—

Accepted average	12·18
50 % of average	6·09
65 % of average	7·91
75 % of average	9·14

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1910	17·22	...	...	...
1911	19·23	...	...	...
1912	11·32	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	24·05
50 % of average	12·03
65 % of average	15·63
75 % of average	18·04

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
30·97	...	...	...	 1910
30·05	...	...	...	 1911
28·22	...	...	...	 1912

HASSAN

ALUR

January to July—

Accepted average	24·14
50 % of average	12·07
65 % of average	15·69
75 % of average	18·11

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1903	31·53	...	...	...
1904	27·64	...	...	...
1905	23·42	...	...	...
1906	15·61	...	F1	F1
1907	29·08	...	...	...
1908	23·66	...	...	...
1909	31·19	...	...	...
1910	25·61	...	...	...
1911	29·28	...	...	...
1912	31·10	...	...	...

DISTRICT.

SUB-TALUK.

January to October—

Accepted average	40·46
50 % of average	20·23
65 % of average	26·29
75 % of average	30·35

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
47·25	...	...	...	 1903
36·41	...	...	...	 1904
35·61	...	...	...	 1905
46·63	...	...	...	 1906
47·83	...	...	...	 1907
29·71	...	...	F2	 1908
46·51	...	...	...	 1909
45·55	...	...	...	 1910
40·62	...	...	...	 1911
52·95	...	...	...	 1912

GSL

SHIMOGA

SHIMOGA

January to July—

Accepted average	19·48
50 % of average	9·74
65 % of average	12·66
75 % of average	14·61

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	17·82	...	...	...
1871	23·08	...	...	...
1872	17·87	...	...	...
1873	14·05	...	...	F1
1874	22·77	...	...	...
1875	18·69	...	...	...
1876	14·59	...	...	F1
1877	12·39	...	F1	F1
1878	12·94	...	...	F1
1879	22·80	...	...	...
1880	18·59	...	...	...
1881	12·35	...	F1	F1
1882	42·37	...	...	
1883	22·54	...	...	...
1884	11·11	...	F1	F1
1885	17·13	...	...	...
1886	20·64	...	...	...
1887	19·42	...	...	...
1888	24·06	...	...	...
1889	19·86	...	...	...
1890	21·80	...	...	...
1891	20·63	...	...	...
1892	19·37	...	...	...
1893	19·88	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	33·40
50 % of average	16·70
65 % of average	21·71
75 % of average	25·05

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
37·24	...	...	...	 1870
32·90	...	...	...	 1871
29·15	...	...	...	 1872
28·53	...	...	...	 1873
38·67	...	...	...	 1874
26·33	...	...	...	 1875
19·76	...	F2	F2	 1876
37·17	...	...	...	 1877
27·31	...	...	...	 1878
34·67	...	...	...	 1879
31·49	...	...	...	 1880
19·26	...	F2	F2	 1881
55·89	...	...	...	 1882
43·26	..	...	...	 1883
29·87	...	...	...	 1884
33·46	...	...	...	 1885
35·87	...	...	...	 1886
29·59	..	...	...	 1887
34·20	..	...	...	 1888
39·30	...	...	...	 1889
33·82	...	...	...	 1890
32·21	...	...	...	 1891
32·81	...	...	..	 1892
34·16	...	...	...	 1893

CSL

SHIMOGA

SHIMOGA

January to July—

Accepted average	19·48
50 % of average	9·74
65 % of average	12·66
75 % of average	14·61

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	16·32	...	...	...
1895	20·32	...	...	...
1896	30·10	...	...	...
1897	19·39	...	...	...
1898	21·33	...	...	...
1899	15·44	...	...	...
1900	23·27	...	...	...
1901	16·06	...	...	...
1902	19·69	...	...	...
1903	18·12	...	...	...
1904	24·01	...	...	...
1905	13·39	...	...	F1
1906	14·44	...	...	F1
1907	16·37	...	...	...
1908	15·72	...	...	...
1909	23·89	...	...	...
1910	14·46	...	...	F1
1911	16·77	...	...	...
1912	31·57	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	33·40
50 % of average	16·70
65 % of average	21·71
75 % of average	25·05

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
27·33	...	...	...	 1894
37·77	...	...	...	 1895
44·99	...	...	...	 1896
33·79	...	...	...	 1897
42·60	...	...	...	 1898
28·12	...	...	...	 1899
40.92	...	...	...	 1900
33·23	...	...	...	 1901
35·57	...	...	...	 1902
27·94	...	...	...	 1903
34·56	...	...	..	 1904
23·17	...	...	F2	 1905
37·44	...	...	...	 1906
30·63	...	...	...	 1907
22·80	...	...	F2	 1908
33·11	...	...	...	 1909
30·44	...	...	...	 1910
30·60	...	...	...	 1911
44·37	...	...	...	 1912

SHIMOGA

CHANNAGIRI

January to July—

Accepted average	13·32
50 % of average	6·66
65 % of average	8·65
75 % of average	9·99

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1873	4·85	F1	F1	F1
1874	21·07	...	...	...
1875	10·85	...	...	...
1876	11·44	...	...	...
1877	8·32	...	F1	F1
1878	11·84	...	..	...
1879	19·31	...	...	...
1880	20·46	...	...	...
1881	9·23	...	...	F1
1882	24·08	...	...	...
1883	17·23	...	...	...
1884	3·85	F1	F1	F1
1885	9·58	...	..	F1
1886	13·99	...	...	...
1887	13·47	...	...	...
1888	13·99	...	...	...
1889	10·30	...	...	...
1890	14·32	...	...	...
1891	12·48	...	...	...
1892	11·84	...	...	...
1893	17·48	...	...	...
1894	8·01	...	F1	F1
1895	12·49	...	..	...

DISTRICT.

TALUK.

January to October—

Accepted average	25·51
50 % of average	12·76
65 % of average	16·58
75 % of average	19·13

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
16·51	...	F2	F2	 1873
40·34	...	...	...	 1874
17·99	...	...	F2	 1875
14·59	...	F2	F2	 1876
22·45	...	...	...	 1877
25·40	...	...	...	 1878
29·91	...	...	...	 1879
33·93	...	...	...	 1880
13·35	...	F2	F2	 1881
33·05	...	...	...	 1882
26·61	...	...	...	 1883
9·34	F2	F2	F2	 1884
26·38	...	...	...	 1885
32·73	...	...	...	 1886
25·83	...	...	...	 1887
20·56	...	...	...	 1888
27·08	...	...	...	 1889
25·50	...	...	...	 1890
20·45	...	...	...	 1891
20·11	...	...	...	 1892
29·19	...	...	...	 1893
19·50	...	...	...	 1894
25·54	...	...	...	 1895

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SHIMOGA

CHANNAGIRI

January to July—

Accepted average	13·32
50 % of average	6·66
65 % of average ... ...,	8·65
75 % of average	9·99

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1896	14·91	...	...	...
1897	12·98	...	...	...
1898	13·66	...	...	...
1899	14·36	...	...	...
1900	12·44	...	...	...
1901	11·07	...	...	...
1902	9·87	...	...	F1
1903	12·77	...	...	..
1904	17·38	...	...	...
1905	13·92	...	...	...
1906	10·70	..	...	...
1907	13·13	...	...	...
1908	13 90	...	...	...
1909	13·85	...	...	...
1910	16·25	...	...	...
1911	12·53	...	...	...
1912	14·79	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	25 51
50 % of average	12·76
65 % of average	16·58
75 % of average	19·13

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
26·49	...	...	...	 1896
28·27	...	...	...	 1897
32·92	...	...	...	 1898
24·56	...	...	...	 1899
25·51	...	...	...	 1900
22·99	...	...	...	 1901
28·66	...	...	...	 1902
25·14	...	...	...	 1903
24·25	...	...	...	 1904
22·33	...	...	...	 1905
35·00	...	...	...	 1906
29·40	...	...	...	 1907
19·95	...	...	...	 1908
25·33	...	...	...	 1909
39·80	...	...	...	 1910
26·88	...	...	...	 1911
28·25	...	...	...	 1912

SHIMOGA

HONNALI

January to July—

Accepted average	11·84
50 % of average	5·92
65 % of average	7·70
75 % of average	8·88

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	11·47	...	...	...
1871	13·70	..	...	...
1872	16·40	...	...	...
1873	11·13	...	...	...
1874	22·86	...	...	...
1875	16·02	...	...	...
1876	5·60	F1	F1	F1
1877	9·20	...	...	...
1878	9·07	...	...	...
1879	19·46	...	...	...
1880	11·52	...	...	...
1881	1·65	F1	F1	F1
1882	26·98	...	...	...
1883	13·10	...	...	...
1884	10·75	...	...	...
1885	10·04	...	...	...
1886	8·72	...	...	F1
1887	7·70	...	...	F1
1888	16·26	...	...	...
1889	9·27	...	...	...
1890	11·32	...	...	...
1891	7·80	...	...	F1
1892	13·85	...	...	...
1893	11·92	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	21·28
50 % of average	10·64
65 % of average	13·83
75 % of average	15·96

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
17·72	...	...	...	 1870
21·20	...	...	...	 1871
23·15	...	...	...	 1872
22·66	...	...	...	 1873
33·75	...	...	...	 1874
19·27	...	..	...	 1875
6·60	F2	F2	F2	 1876
25·05	...	...	...	 1877
22·89	...	...	...	 1878
31·29	...	...	...	 1879
25·15	...	...	...	 1880
4·62	F2	F2	F2	 1881
35·86	...	...	...	 1882
24·57	...	...	...	 1883
19·78	...	...	...	 1884
25·27	...	...	...	 1885
19·88	...	...	...	 1886
14·14	...	...	F2	 1887
25·16	...	...	...	 1888
20·02	...	..	...	 1889
17·64	...	...	...	 1890
15·07	...	...	F2	 1891
20·93	...	...	...	 1892
19·75	...	...	...	 1893

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SHIMOGA

HONNALI

January to July—

Accepted average	11·84
50 % of average	5·92
65 % of average	7·70
75 % of average	8·88

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	9·69	...	...	...
1895	9·43	...	...	...
1896	17·59	...	...	...
1897	13·40	...	...	...
1898	13·89	...	...	...
1899	8·25	...	...	F1
1900	10·29	...	...	...
1901	11·91	...	...	...
1902	12·52	...	...	...
1903	11·96	...	...	...
1904	15·93	...	...	...
1905	10·09	...	...	...
1906	9·26	...	...	...
1907	7·91	...	...	F1
1908	8·21	...	...	F1
1909	9·67	...	...	...
1910	11·04	...	...	...
1911	13·15	...	...	...
1912	9·35	...	...	...

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	21·28
50 % of average	10 64
65 % of average	13·83
75 % of average	15·96

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
14·68	...	...	F2	 1894
19·07	...	...	...	 1895
26·57	...	...	...	 1896
23·47	...	...	...	 1897
30·08	...	...	...	 1898
16·80	...	...	...	 1899
15·58	...	...	F2	 1900
30·04	...	...	...	 1901
23·73	...	...	...	 1902
25·68	...	...	...	 1903
20·72	...	...	...	 1904
17·53	...	...	...	 1905
20·82	...	...	...	 1906
18·10	...	...	...	 1907
13·99	...	...	F2	 1908
15·24	...	...	F2	 1909
22·82	...	...	...	 1910
25·40	...	...	...	 1911
23·70	...	...	...	 1912

SHIMOGA

SHIKARPUR

January to July—

Accepted average	18·61
50 % of average	9·31
65 % of average	12·09
75 % of average	13·96

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1873	8·82	F1	F1	F1
1874	23·57	..	...	...
1875	14·60	...	...	...
1876	15·05	...	...	...
1877	6·15	F1	F1	F1
1878	5·68	F1	F1	F1
1879	20·11	...	...	...
1880	20·08	...	...	...
1881	10·73	...	F1	F1
1882	44·02	...	...	...
1883	27·68	...	...	...
1884	15·40	...	...	...
1885	13·75	...	...	F1
1886	24·90	...	...	...
1887	18·42	...	...	...
1888	23·73	...	...	...
1889	15·50	...	...	...
1890	16·30	...	...	...
1891	13·55	...	...	F1
1892	17·35	...	...	...
1893	16·90	...	...	...
1894	15·08	...	...	...
1895	18·05	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	31·37
50 % of average	15·69
65 % of average	20·39
75 % of average	23·53

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
19·43	...	F2	F2	 1873
33·97	...	...	...	 1874
19·95	...	F2	F2	 1875
20·17	...	F2	F2	 1876
13·51	F2	F2	F2	 1877
11·24	F2	F2	F2	 1878
28·30	...	...	...	 1879
40·50	...	...	...	 1880
21·32	...	...	F2	 1881
55·92	...	...	...	 1882
46·68	...	...	...	 1883
32·03	...	...	...	 1884
33·50	...	..	...	 1885
39·55	...	...	...	 1886
26·60	...	...	...	 1887
34·30	...	...	...	 1888
36·18	...	...	...	 1889
26·70	...	...	...	 1890
23·25	...	...	F2	 1891
32·30	...	...	...	 1892
28·05	...	...	...	 1893
27·22	...	...	...	 1894
30·25	...	...	...	 1895

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SHIMOGA

SHIKARPUR

January to July—

Accepted average	18·61
50 % of average	9·31
65 % of average	12·09
75 % of average	13·96

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1896	31·43	...	...	...
1897	16·16	...	...	...
1898	20·52	...	...	...
1899	13·01	...	...	F1
1900	23·58	...	...	...
1901	21·42	...	...	...
1902	23·21	...	...	...
1903	27·65	...	...	...
1904	26·65	...	...	...
1905	12·38	...	...	F1
1906	13·55	...	...	F1
1907	19·34	...	...	...
1908	21·89	...	...	...
1909	25·63	...	...	...
1910	14·27	...	...	...
1911	22·06	...	...	...
1912	22·85	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	31·37
50 % of average	15·69
65 % of average	20·39
75 % of average	23·53

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
46·01	...	...	...	1896
29·67	...	...	...	1897
39·33	...	...	...	1898
29·69	...	...	...	1899
36·32	...	...	...	1900
40·10	...	...	...	1901
43·02	...	...	...	1902
39·57	...	...	...	1903
34·47	...	...	...	1904
21·20	...	...	F2	1905
27·27	...	...	...	1906
38·42	...	...	...	1907
31·38	...	...	...	1908
35·84	...	...	...	1909
33·25	...	...	...	1910
35·05	...	...	...	1911
43·16	...	...	...	1912

SHIMOGA

SORAB

January to July—

Accepted average	36·79
50 % of average	18·40
65 % of average	23·90
75 % of average	27·59

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1873	9·06	F1	F1	F1
1874	44·22	...	...	...
1875	32·61	...	...	...
1876	39·65	...	...	...
1877	16·46	F1	F1	F1
1878	15·67	F1	F1	F1
1879	28·26	...	...	...
1880	36·78	...	...	...
1881	21·55	...	F1	F1
1882	70·25	...	...	...
1883	49·95	...	...	...
1884	25·50	...	...	F1
1885	27·10	...	...	F1
1886	34·45	...	...	...
1887	47·06	...	...	...
1888	56·70	...	...	...
1889	34·76	...	...	...
1890	36·16	...	...	...
1891	32·72	...	...	...
1892	47·22	...	...	...
1893	29·19	...	...	...
1894	37·99	...	...	...
1895	36·09	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average ... ... 57·47
50 % of average ... ... 28·74
65 % of average ... ... 37·35
75 % of average ... ... 43·10

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
28·95	...	F2	F2	 1873
53·74	...	...	...	 1874
33·50	...	F2	F2	 1875
46·96	...	...	...	 1876
35·67	...	F2	F2	 1877
63·57	...	...	...	 1878
45·84	...	...	...	 1879
52·80	...	...	...	 1880
38·95	...	...	F2	 1881
86·41	...	...	...	 1882
79·70	...	...	...	 1883
53·60	...	...	...	 1884
51·51	...	...	...	 1885
48·71	...	...	...	 1886
58·43	...	...	...	 1887
78·58	...	...	...	 1888
63·85	...	...	...	 1889
59·52	...	...	...	 1890
55·33	...	...	...	 1891
74·82	...	...	...	 1892
54·92	...	...	...	 1893
58·00	...	...	...	 1894
60·63	...	...	...	 1895

SHIMOGA

SORAB

January to July—

Accepted average	36·79
50 % of average	18·40
65 % of average	23·90
75 % of average	27·59

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1896	55·30	...	...	...
1897	37·71	...	...	...
1898	41·28	...	...	...
1899	30·42	...	...	...
1900	45·57	...	...	...
1901	36·10	...	...	...
1902	39·92	...	...	...
1903	36·34	...	...	...
1904	45·97	...	...	...
1905	22·07	...	F1	F1
1906	28·33	...	...	...
1907	36·55	...	...	...
1908	42·13	...	...	...
1909	55·17	...	...	...
1910	38·21	...	...	...
1911	40·54	...	...	...
1912	43·83	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	57·47
50 % of average	28·74
65 % of average	37·35
75 % of average	43·10

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
88·27	...	...	...	 1896
66·82	...	...	...	 1897
67·01	...	...	...	 1898
43·48	...	...	...	 1899
68·22	...	...	...	 1900
54·71	...	...	...	 1901
63·65	...	...	...	 1902
50·25	...	...	...	 1903
62·31	...	...	...	 1904
34·53	...	F2	F2	 1905
43·99	...	...	...	 1906
67·82	...	...	...	 1907
60·62	...	...	...	 1908
70·17	...	...	...	 1909
69·42	...	...	...	 1910
59·83	...	...	...	 1911
73·64	...	...	...	 1912

CSL

SHIMOGA

SAGAR

January to July—

Accepted average	49·45
50 % of average	24·73
65 % of average	32·14
75 % of average	37·09

Year			Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1885	...	...	40·80	...	...	...
1886	...	...	48·30	...	...	...
1887	...	...	55·52	...	...	...
1888	...	...	58·41	...	...	...
1889	...	...	52·07	...	..	...
1890	...	...	45·37	...	...	...
1891	...	...	37·89	...	...	...
1892	...	...	32·11	...	F1	F1
1893	...	...	41·39	...	...	...
1894	...	...	37·99	...	...	...
1895	...	...	46·76	...	...	...
1896	...	...	80·78	...	...	...
1897	...	...	56·88	...	...	...
1898	...	...	50·02	...	...	...
1899	...	...	31·78	...	F1	F1
1900	...	..	72.43	...	...	...
1901	...	..	50.81	...	...	...
1902	...	...	59.17	...	...	...
1903	...	...	54.23	...	...	...
1904	...	...	58.56	...	...	...
1905	...	...	27.66	...	F1	F1
1906	...	...	44.85	..	...	...
1907	...	...	58.07	...	...	...
1908	...	...	63.74	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	74·70
50 % of average	37·35
65 % of average	48·50
75 % of average	56·03

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
73·44	...	...	...	 1885
66·40	...	...	...	 1886
70·81	...	...	...	 1887
82·93	...	...	...	 1888
84·88	...	...	...	 1889
72·55	...	...	...	 1890
64·79	...	...	...	 1891
59·40	...	...	...	 1892
69·65	...	...	...	 1893
60·18	...	...	...	 1894
80·83	...	...	...	 1895
122·51	...	...	...	 1896
84·43	...	...	...	 1897
84·08	...	...	...	 1898
45·66	...	F2	F2	 1899
104·63	..	...	...	 1900
76·56	..	...	...	 1901
92·61	...	...	...	 1902
74·53	...	...	...	 1903
78·32	...	..	...	 1904
47·29	...	F2	F2	 1905
67·85	...	...	..	 1906
98·18	...	...	...	 1907
86·65	...	...	...	 1908

GSL

SHIMOGA

SAGAR

January to July—

Accepted average	49·45
50 % of average	24·73
65 % of average	32·14
75 % of average	37·09

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1909	60·83	...	...	...
1910	41·27	...	...	...
1911	54·33	...	...	...
1912	59·43	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	74·70
50 % of average	37·35
65 % of average	48·50
75 % of average	56·03

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
79·38	...	...	...	 1909
91·44	...	...	...	 1910
74·06	...	...	...	 1911
93·58	...	...	...	 1912

CSL

SHIMOGA

NAGAR

January to July—

Accepted average	125·96
50 % of average	62·98
65 % of average	81·87
75 % of average	94·47

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	102·81	...	...	...
1871	103·98	...	...	...
1872	91·34	...	...	F1
1873	162·15	...	...	...
1874	122·83	...	...	...
1875	143·12	...	...	...
1876-1879	Not available			
1880	129·53	...	...	...
1881	112·79	...	...	...
1882	243·05	...	...	...
1883	150·04	...	...	...
1884	114·75	...	...	...
1885	122·90	...	...	...
1886	108·10	...	...	...
1887	130·12	...	...	...
1888	141·57	...	...	...
1889	114·21	...	...	...
1890	128·76	...	...	...
1891	111·36	...	...	...
1892	157·30	...	...	...
1893	81·50	...	F1	F1
1894	109·85	...	...	...
1895	109·72	...	...	...
1896	230·72	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	190·74
50 % of average	95·37
65 % of average	123·98
75 % of average	143·06

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
181·27	...	...	...	 1870
144·55	...	...	...	 1871
154·05	...	...	...	 1872
199·25	...	...	...	 1873
172·33	...	...	...	 1874
204·63	...	...	...	 1875
Not	available			 1876-1879
168·42	...	...	...	 1880
206·05	...	...	...	 1881
290·90	...	...	...	 1882
232·24	...	...	...	 1883
198·69	...	...	...	 1884
190·10	...	...	...	 1885
153·90	...	...	...	 1886
173·50	...	...	...	 1887
208·82	...	...	...	 1888
201·12	...	...	...	 1889
185·79	...	...	...	 1890
188·77	...	...	...	 1891
244·76	...	...	...	 1892
141·34	...	...	F2	 1893
167·47	...	...	...	 1894
173·80	...	...	...	 1895
369·70	...	...	...	 1896

SHIMOGA

NAGAR

January to July—

Accepted average	125·96
50 % of average	62·98
65 % of average	81·87
75 % of average	94·47

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1897	117·21	...	...	...
1898	106·54	...	...	...
1899	107·65	...	...	...
1900	181·35	...	...	...
1901	135·62	...	...	...
1902	103·63	...	...	...
1903	127·27	...	...	...
1904	144·62	...	...	...
1905	108·78	...	...	...
1906	111·50	...	...	...
1907	137·29	...	...	...
1908	146·13	...	...	...
1909	149·75	...	...	...
1910	100·06	...	...	...
1911	146·01	...	...	...
1912	162·65	...	...	...

CSL

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	... 190·74
50 % of average	... 95·37
65 % of average	... 123·98
75 % of average	... 143·06

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
200·61	...	...	...	 1897
164·39	...	...	...	 1898
130·09	...	...	F2	 1899
265·22	...	...	...	 1900
190·18	...	...	...	 1901
154·52	...	...	...	 1902
169·58	...	...	...	 1903
210·10	...	...	...	 1904
152·73	...	...	...	 1905
160·19	...	...	...	 1906
248·41	...	...	...	 1907
201·61	...	...	...	 1908
181·41	...	...	...	 1909
188·04	...	...	...	 1910
222·01	...	...	...	 1911
258·12	...	...	...	 1912

SHIMOGA

TIRTHAHALLI

January to July—

Accepted average	74·15
50 % of average	37·08
65 % of average	48·19
75 % of average	55·61

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	64·72	...	...	...
1871	65·22	...	...	...
1872	83·73	...	...	...
1873	69·46	...	...	...
1874	102·29	...	.	...
1875	61·23	...	...	...
1876	74·10	...	...	...
1877	50·30	...	...	F1
1878	31·74	F1	F1	F1
1879	59·97	...	..	...
1880	71·38	...	...	...
1881	38·45	...	F1	F1
1882	124·66	...	...	...
1883	94·38	...	...	...
1884	54·78	...	...	F1
1885	64·43	...	...	...
1886	61·01	...	...	...
1887	80·33	...	...	...
1888	84·01	...	...	...
1889	62·12	...	...	...
1890	71·13	...	...	...
1891	58·87	..	...	...
1892	79·59	...	...	...
1893	56·69	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	113·75
50 % of average	56·88
65 % of average	73·94
75 % of average	85·31

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
96·95	...	...	...	 1870
98·33	..	...	...	 1871
115·60	...	...	...	 1872
109·94	...	..	...	 1873
137·01	...	...	...	 1874
91·43	...	...	...	 1875
94·95	..	...	...	 1876
92·93	...	...	...	 1877
90·29	...	...	...	 1878
104·69	...	...	...	 1879
99·13	...	...	...	 1880
83·17	...	...	F2	 1881
161·15	...	...	...	 1882
151·13	...	...	...	 1883
113·04	...	...	...	 1884
105·89	...	...	...	 1885
97·35	...	...	...	 1886
104·69	..	..	...	 1887
120·38	...	...	...	 1888
126·91	...	...	...	 1889
98·41	...	...	...	 1890
93·70	...	...	...	 1891
118·68	...	...	...	 1892
95·00	...	...	...	 1893

CSL

SHIMOGA

TIRTHAHALLI

January to July—

Accepted average	74·15
50 % of average	37·08
65 % of average	48·19
75 % of average	55·61

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	62·45	...	...	...
1895	71·98	...	...	...
1896	120·13	...	...	...
1897	77·44	...	...	...
1898	69·71	...	...	...
1899	56·08	...	...	...
1900	117·08	...	...	...
1901	83·35	...	...	...
1902	64·21	...	...	...
1903	83·84	...	...	...
1904	87·25	...	...	...
1905	54·57	...	...	F1
1906	61·19	...	...	...
1907	75·11	...	...	...
1908	93·59	...	...	...
1909	102·95	...	...	...
1910	64·88	...	...	...
1911	81·96	...	...	...
1912	96·20	...	...	...

CSL

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	113·75
50 % of average	56·88
65 % of average	73·94
75 % of average	85·31

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
98·49	...	...	...	 1894
105·20	...	...	...	 1895
156·52	...	...	...	 1896
129·37	...	...	...	 1897
119·27	...	...	...	 1898
76·51	...	...	F2	 1899
166·55	...	...	...	 1900
126·39	...	...	...	 1901
111·97	...	...	...	 1902
122·38	...	...	...	 1903
116·47	...	...	...	 1904
83·97	...	...	F2	 1905
91·85	...	...	...	 1906
146·08	...	...	...	 1907
133·24	...	...	...	 1908
123·66	...	...	...	 1909
115·72	...	...	...	 1910
118·87	...	...	...	 1911
148·29	...	...	...	 1912

SHIMOGA

KUMSI

January to July—

Accepted average	23·63
50 % of average	11·82
65 % of average	15·35
75 % of average	17·72

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	17·02	...	...	F1
1884	10·11	F1	F1	F1
1885	18·65	...	...	...
1886	23·02	...	...	...
1887	25·95	...	..	...
1888	30·31	...	...	...
1889	19·77	...	...	...
1890	21·02	...	...	...
1891	20·92	...	...	...
1892	26·17	...	...	...
1893	16·66	...	...	F1
1894	15·73	...	...	F1
1895	20·93	...	...	...
1896	36·32	...	...	...
1897	23·31	...	...	...
1898	25·27	...	...	...
1899	16·55	...	...	F1
1900	24·51	...	...	...
1901	26·08	...	...	...
1902	24·99	...	...	...
1903	28·52	...	...	...
1904	30·11	...	...	...
1905	14·38	...	F1	F1

DISTRICT.

SUB-TALUK.

January to October—

Accepted average	38·19
50 % of average	19·10
65 % of average	24·82
75 % of average	28·64

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
32·41	...	...	...	 1883
28·85	...	...	...	 1884
39·45	...	...	...	 1885
40·47	...	...	...	 1886
36·63	...	...	...	 1887
40·54	...	...	...	 1888
34·84	...	...	...	 1889
33·29	...	...	...	 1890
34·12	...	...	...	 1891
42·00	...	...	...	 1892
35·00	...	...	...	 1893
28·33	...	...	F2	 1894
33·63	...	...	...	 1895
53·56	...	...	...	 1896
39·24	...	...	...	 1897
47·52	...	...	...	 1898
27·67	...	...	F2	 1899
40·05	...	...	...	 1900
40·87	...	...	...	 1901
47·05	...	...	...	 1902
45·66	...	...	...	 1903
42·16	...	...	...	 1904
25·56	...	...	F2	 1905

CSL

SHIMOGA

KUMSI

January to July—

Accepted average	23·63
50 % of average	11·82
65 % of average	15·35
75 % of average	17·72

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1906	19·69	...	...	...
1907	24·87	...	...	...
1908	24·36	...	...	...
1909	31·59	...	...	...
1910	22·86	...	...	...
1911	21·38	...	...	...
1912	22·59	...	...	...

DISTRICT.

SUB-TALUK—*concld.*

January to October—

Accepted average	38·19
50 % of average	19·10
65 % of average	24·82
75 % of average	28·64

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
37·56	...	...	...	 1906
43·48	...	...	...	 1907
34·85	...	...	...	 1908
43·68	...	...	...	 1909
45·29	...	...	...	 1910
34·52	...	...	...	 1911
39·56	...	...	...	 1912

KADUR

CHICKMAGALUR

January to July—

Accepted average	19·79
50 % of average	9·90
65 % of average	12·87
75 % of average	14·84

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	16·52	...	...	...
1871	17·27	...	...	...
1872	19·84	...	...	...
1873	11·79	...	F1	F1
1874	26·00	...	...	...
1875	17·82	...	...	...
1876	18·58	...	...	...
1877	13·94	...	...	F1
1878	14·66	...	...	F1
1879	24·97	...	...	...
1880	20·58	...	...	...
1881	10·87	...	F1	F1
1882	37·00	...	...	...
1883	24·20	...	...	...
1884	7·85	F1	F1	F1
1885	13·61	...	...	F1
1886	19·88	...	...	...
1887	18·31	...	...	...
1888	11·92	...	F1	F1
1889	18·04	...	...	...
1890	17·02	...	...	...
1891	19·58	...	...	...
1892	24·60	...	...	...
1893	18·00	...	...	...

CSL

APPENDIX II

DISTRICT.

TALUK.

January to October—

Accepted average	33·34
50 % of avarage	16·67
65 % of average	21·68
75 % of average	25·01

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
31·09	...	...	...	 1870
28·45	...	...	...	 1871
30·74	...	...	...	 1872
29·78	...	...	...	 1873
39·50	...	...	...	 1874
22·00	...	...	F2	 1875
21·99	...	...	F2	 1876
38·52	...	...	...	 1877
30·95	...	...	...	 1878
38·99	...	...	...	 1879
33·75	...	...	...	 1880
17·59	...	F2	F2	 1881
51·01	...	...	...	 1882
45·42	...	...	...	 1883
32·47	...	...	...	 1884
36·40	...	...	...	 1885
34·28	...	...	...	 1886
30·51	...	...	...	 1887
23·17	...	...	F2	 1888
41·76	...	...	...	 1889
26·48	...	...	...	 1890
31·33	...	...	...	 1891
33·33	...	...	...	 1892
30·63	...	...	...	 1893

KADUR

CHICKMAGALUR

January to July—

Accepted average	19·79
50 % of average	9·90
65 % of average	12·87
75 % of average	14·84

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	19·62	...	...	...
1895	24·01	...	...	...
1896	33·24	...	...	...
1897	21·50	...	...	...
1898	12·81	...	F1	F1
1899	17·62	...	...	...
1900	16·62	...	...	..
1901	17·92	...	...	...
1902	17·15	...	...	...
1903	27·58	...	...	...
1904	24·35	...	...	...
1905	13·09	...	...	F1
1906	18·03	...	...	..
1907	20·73	...	...	...
1908	15·54	...	...	...
1909	29·29	...	...	...
1910	23·30	..	...	...
1911	28·45	...	...	...
1912	27·29	...	...	..

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DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	33·34
50 % of average	16·67
65 % of average	21·68
75 % of average	25·01

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
29·29	...	...	...	 1894
34·50	...	...	...	 1895
46·91	...	...	...	 1896
39·05	...	...	...	 1897
32·50	...	...	...	 1898
28·11	...	...	...	 1899
29·61	...	...	...	 1900
29·72	...	...	...	 1901
29·08	...	...	...	 1902
36·77	...	...	...	 1903
34·34	...	...	...	 1904
23·08	...	...	F2	 1905
35·94	...	...	...	 1906
35·63	...	...	...	 1907
21·67	...	F2	F2	 1908
40·47	...	...	...	 1909
43·48	...	...	...	 1910
37·33	...	...	...	 1911
46·11	...	...	...	 1912

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KADUR

KADUR

January to July—

Accepted average	9·79
50 % of average	4·90
65 % of average	6·36
75 % of average	7·34

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	7·33	...	...	F1
1884	2·07	F1	F1	F1
1885	2·65	F1	F1	F1
1886	7·28	...	...	F1
1887	19·07	...	...	...
1888	5·41	...	F1.	F1
1889	15·45	...	...	...
1890	8·28	...	...	...
1891	7·65	...	...	...
1892	14·86	...	...	...
1893	13·21	...	...	...
1894	9·19	...	...	...
1895	11·20	...	...	...
1896	12·49	...	...	...
1897	8·47	...	...	...
1898	9·70	...	...	...
1899	14·22	...	...	...
1900	5·61	...	F1	F1
1901	8·66	...	...	...
1902	8·07	...	...	...
1903	15·41	...	...	...
1904	11·10	...	...	...
1905	10·15	...	...	...
1906	6·30	...	F1	F1

DISTRICT.

TALUK.

January to October—

Accepted average	19·27
50 % of average	9·64
65 % of average	12·53
75 % of average	14·45

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
19·80	...	...	...	1883
6·46	F2	F2	F2	1884
15·41	...	...	...	1885
17·70	...	...	...	1886
27·06	...	...	...	1887
11·88	...	F2	F2	1888
31·08	...	...	...	1889
13·75	...	...	F2	1890
18·93	...	...	...	1891
22·60	...	...	...	1892
25·26	...	...	...	1893
12·79	...	...	F2	1894
18·81	...	...	...	1895
19·41	...	...	...	1896
18·56	...	...	...	1897
31·42	...	...	...	1898
21·15	...	...	...	1899
14·36	...	...	F2	1900
15·39	...	...	...	1901
23·62	...	...	...	1902
23·66	...	...	...	1903
17·43	...	...	...	1904
15·46	...	...	...	1905
22·73	...	...	...	1906

KADUR

KADUR

January to July—

Accepted average	9·79
50 % of average	4·90
65 % of average	6·36
75 % of average	7·34

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	11·82	...	...	...
1908	6·67	...	...	F1
1909	14·91	...	...	...
1910	11·54	...	...	...
1911	10·65	...	...	...
1912	11·07	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	19·27
50 % of average	9·64
65 % of average	12·53
75 % of average	14·45

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
20·99	...	...	...	 1907
10·83	...	F2	F2	 1908
22·48	...	...	...	 1909
24·91	...	...	...	 1910
17·40	...	...	...	 1911
29·05	...	...	...	 1912

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KADUR

TARIKERE

January to July—

Accepted average	15·96
50 % of average	7·98
65 % of average	10·37
75 % of average	11·97

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1880	11·85	...	...	F1
1881	6·20	F1	F1	F1
1882	32·24	...	...	...
1883	19·92	...	...	...
1884	10·35	...	F1	F1
1885	11·83	...	...	F1
1886	16·60	...	...	...
1887	12·60	...	...	...
1888	15·95	...	...	...
1889	13·64	...	...	...
1890	11·59	...	...	F1
1891	17·86	...	...	...
1892	22·73	...	...	...
1893	17·50	...	...	...
1894	16·59	...	...	...
1895	16·84	...	...	...
1896	30·41	...	...	...
1897	18·98	...	...	...
1898	17·03	...	...	...
1899	19·81	...	...	...
1900	22·51	...	...	...
1901	16·17	...	...	...
1902	10·72	...	...	F1
1903	25·75	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	28·91
50 % of average	14·46
65 % of average	18·75
75 % of average	21·68

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
22·67	...	...	...	 1880
13·82	F2	F2	F2	 1881
42·09	...	...	...	 1882
43·30	...	...	...	 1883
25·40	...	...	...	 1884
27·43	...	...	...	 1885
27·10	...	...	...	 1886
27·25	...	..	...	 1887
25·00	...	...	...	 1888
26·20	...	...	...	 1889
19·16	...	...	F2	 1890
33·74	...	...	...	 1891
35·88	...	...	...	 1892
30·75	...	...	...	 1893
29·89	...	...	...	 1894
28·58	...	...	...	 1895
42·96	...	...	...	 1896
33·63	...	...	...	 1897
40·42	...	...	...	 1898
32·41	...	...	...	 1899
42·64	...	...	...	 1900
30·33	...	...	...	 1901
26·27	...	...	...	 1902
38·25	..	...	...	 1903

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KADUR

TARIKERE

January to July—

Accepted average	15·96
50 % of average	7·98
65 % of average	10·37
75 % of average	11·97

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1904	21·56	...	...	...
1905	20·45	...	...	...
1906	16·27	...	...	...
1907	13·00	...	...	...
1908	15·96	...	...	...
1909	22·47	...	...	...
1910	15·24	...	...	...
1911	18·88	...	...	...
1912	19·77	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	28·91
50 % of average	14·46
65 % of average	18·75
75 % of average	21·68

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
29·89	...	...	...	 1904
32·78	...	...	...	 1905
37·25	...	...	...	 1906
32·14	...	...	...	 1907
23·57	...	...	...	 1908
33·25	...	...	...	 1909
36·85	...	...	...	 1910
29·78	...	...	...	 1911
36·80	...	...	...	 1912

KADUR

KOPPA

January to July—

Accepted average	74·23
50 % of average	37·12
65 % of average	48·25
75 % of average	55·67

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1881	42·42	...	F1	F1
1882	122·35	...	...	...
1883	94·52	...	...	...
1884	52·24	...	...	F1
1885	56·53	...	...	...
1886	92·15	...	...	...
1887	86·20	...	...	...
1888	91·04	...	...	...
1889	71·66	...	...	...
1890	68·77	...	...	...
1891	61·76	...	...	...
1892	84·13	...	...	...
1893	60·49	...	...	...
1894	67·88	...	...	...
1895	69·51	...	...	...
1896	125·49	...	...	...
1897	79·95	...	...	...
1898	83·65	...	...	...
1899	53·24	...	...	F1
1900	68·99	...	...	...
1901	80·59	...	...	...
1902	61·45	...	...	...
1903	83·51	...	...	...
1904	83·77	...	...	...

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TALUK.

January to October—

Accepted average	116·54
50 % of average	58·27
65 % of average	75·25
75 % of average	87·41

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
84·25	...	...	F2	1881
157·20	...	...	...	1882
150·52	...	...	...	1883
107·57	...	...	...	1884
101·75	...	...	...	1885
133·65	...	...	...	1886
107·20	...	...	...	1887
132·79	...	...	..	1888
131·98	...	...	...	1889
97·43	...	...	...	1890
96·21	...	...	...	1891
131·04	...	...	...	1892
108·91	...	...	...	1893
115·06	...	...	...	1894
103·91	...	...	...	1895
173·92	...	...	...	1896
150·06	...	...	...	1897
136·25	...	...	...	1898
82·43	...	...	F2	1899
74·04	...	F2	F2	1900
127·57	...	...	...	1901
104·17	...	...	...	1902
124·45	...	...	...	1903
113·50	...	...	...	1904

KADUR

KOPPA

January to July—

Accepted average	74·23
50 % of average	37·12
65 % of average	48·25
95 % of average	55·67

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1905	63·22	...	...	...
1906	56·13	...	...	...
1907	82·27	...	...	..
1908	80·40	...	...	...
1909	92·48	...	...	...
1910	55·66	...	...	F1
1911	74·53	...	...	...
1912	80·94	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average ... ... 116·54
50 % of average ... ... 58·27
65 % of average ... ... 75·25
75 % of average ... ... 87·41

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
85·91	...	...	F2	1905
91·38	...	...	...	1906
156·17	...	...	...	1907
113·93	...	...	...	1908
115·48	...	..	...	1909
109·24	...	...	...	1910
105·00	...	...	...	1911
132·01	...	...	...	1912

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KADUR

MUDGERE

January to July—

Accepted average	59·78
50 % of average	29·89
65 % of average	38·86
75 % of average	44·84

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1880	51·20	...	...	...
1881	59·63	...	...	...
1882	143·19	...	...	...
1883	75·47	...	...	...
1884	29·97	...	F1	F1
1885	53·63	...	...	...
1886	52·98	...	...	...
1887	67·15	...	...	...
1888	63·20	...	...	...
1889	51·27	...	...	...
1890	51·96	...	...	...
1891	60·48	...	...	...
1892	81·15	...	...	...
1893	56·86	...	...	...
1894	47·83	...	...	...
1895	56·26	...	...	...
1896	117·77	...	...	...
1897	67·30	...	...	...
1898	44·66	...	...	F1
1899	43·18	...	...	F1
1900	78·04	...	...	...
1901	48·81	...	...	...
1902	59·98	..	...	...
1903	62·12	...	...	...

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TALUK.

January to October—

Accepted average	95·36
50 % of average	47·68
65 % of average	61·98
75 % of average	71·52

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
79·20	...	...	...	 1880
90·03	...	...	...	 1881
189·86	...	...	...	 1882
135·76	...	...	...	 1883
64·65	...	...	F2	 1884
94·47	...	...	...	 1885
84·48	...	...	...	 1886
107·20	...	...	...	 1887
92·15	...	...	...	 1888
107·07	...	...	...	 1889
73·76	...	...	...	 1890
92·75	...	...	...	 1891
116·77	...	...	...	 1892
90·68	...	...	...	 1893
73·96	...	...	...	 1894
83·79	...	...	...	 1895
160·55	...	...	...	 1896
130-92	...	...	...	 1897
81·35	...	...	...	 1898
64·98	...	...	F2	 1899
139·66	...	...	...	 1900
73·42	...	...	...	 1901
91·08	...	...	...	 1902
94·22	...	...	...	 1903

KADUR

MUDGERE

January to July—

Accepted average	59·78
50 % of average	29·89
65 % of average	38·86
75 % of average	44·84

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1904	67·82	...	...	...
1905	48·78	...	...	...
1906	38·98	...	...	F1
1907	62·79	...	...	...
1908	56·26	...	...	...
1909	82·06	...	...	...
1910	47·80	...	...	...
1911	58·96	...	...	...
1912	88·02	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	95·36
50 % of average	47·68
65 % of average	61·98
75 % of average	71·52

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
89·73	...	...	...	 1904
69·08	...	...	F2	 1905
72·29	...	...	...	 1906
110·93	...	...	...	 1907
77·78	...	...	...	 1908
107·80	...	...	...	 1909
92·06	...	...	...	 1910
80·07	...	...	...	 1911
125·70	...	...	...	 1912

CSL

KADUR

NARASIMHARAJAPURA

January to July—

Accepted average	36·76
50 % of average	18·38
65 % of average	23·89
75 % of average	27·57

Year	Rainfall Jan. to July	Failures 50 % basis	Fialures 65 % basis	Failures 75 % basis
1889	28·53	...	...	...
1890	34·85	...	...	...
1891	34·36	...	...	...
1892	41·53	...	...	...
1893	25·95	...	...	F1
1894	22·03	...	F1	F1
1895	34·26	...	...	...
1896	49·18	...	...	...
1897	33·37	...	...	...
1898	36·30	...	...	...
1899	34·05	...	...	...
1900	50·88	...	...	...
1901	38·50	...	...	...
1902	35·71	...	...	...
1903	46·84	...	...	...
1904	48·11	...	...	...
1905	30·93	...	...	...
1906	34·23	...	...	...
1907	45·40	...	...	...
1908	44·35	...	...	...
1909	62·52	...	...	...
1910	37·35	...	...	...
1911	51·10	...	...	...
1912	48·82	...	...	...

DISTRICT.

SUB-TALUK—(YEDAHALLI).

January to October—

Accepted average	59·21
50 % of average	29·61
65 % of average	38·49
75 % of average	44·41

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
61·45	...	...	...	1889
49·25	...	...	...	1890
51·85	...	...	...	1891
60·93	...	...	...	1892
48·92	...	...	...	1893
42·69	...	...	F2	1894
48·86	...	...	...	1895
72·93	...	...	...	1896
59·62	...	...	...	1897
71·80	...	...	...	1898
47·95	...	...	...	1899
88·06	...	...	...	1900
62·27	...	...	...	1901
63·78	...	...	...	1902
66·36	...	...	...	1903
66·62	...	...	...	1904
46·24	...	...	...	1905
54·25	...	...	...	1906
87·52	...	...	...	1907
61·99	...	...	...	1908
79·18	...	...	...	1909
79·79	...	...	...	1910
75·58	...	...	...	1911
78·73	...	...	...	1912

KADUR

SRINGERI

January to July—

Accepted average	93·38
50 % of average	46·69
65 % of average	60·65
75 % of average	70·04

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1903	98·53	...	...	..
1904	105·89	...	...	...
1905	59·76	...	F1	F1
1906	72·99	...	...	...
1907	98·98	...	...	...
1908	95·96	...	...	..
1909	104·50	...	...	...
1910	65·33	...	...	F1
1911	97·38	...	...	...
1912	109·91	...	...	...

DISTRICT.

JAGIR.

January to October—

Accepted average	... 140·81
50 % of average	... 70·41
65 % of average	... 91·53
75 % of average	... 105·61

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
152·87	...	...	...	 1903
139·07	...	...	...	 1904
102·06	...	...	F2	 1905
113·77	...	...	...	 1906
190·99	...	...	...	 1907
134·73	...	...	...	 1908
129·48	...	...	...	 1909
125·88	...	...	...	 1910
127·71	...	...	...	 1911
166·97	...	...	...	 1912

GSL

CHITALDRUG

CHITALDRUG

January to July—

Accepted average	10·69
50 % of average	5·35
65 % of average	6·95
75 % of average	8·02

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	8·15	...	...	...
1871	13·67	...	...	...
1872	12·63	...	...	...
1873	10·23	...	...	...
1874	15·72	...	...	...
1875	8·78	...	...	...
1876	8·58	...	...	...
1877	9·20	...	...	...
1878	13·89	...	...	...
1879	17·11	...	...	...
1880	12·50	...	...	...
1881	3·05	F1	F1	F1
1882	14·74	...	...	...
1883	10·89	...	...	...
1884	4·51	F1	F1	F1
1885	8·37	...	...	...
1886	5·48	...	F1	F1
1887	8·27	...	...	...
1888	12·55	...	...	...
1889	10·79	...	...	...
1890	8·86	...	...	...
1891	10·27	...	...	...
1892	11·96	...	...	...
1893	16·77	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	22·51
50 % of average	11·26
65 % of average	14·63
75 % of average	16·88

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
24·61	...	...	...	1870
24·12	...	...	...	1871
25·00	...	...	...	1872
30·98	...	...	...	1873
33·55	...	...	...	1874
11·80	...	F2	F2	1875
9·98	F2	F2	F2	1876
28·35	...	...	...	1877
25·32	...	...	...	1878
22·86	...	...	...	1879
31·03	...	...	...	1880
11·43	...	F2	F2	1881
22·51	...	...	...	1882
24·87	...	...	...	1883
14·61	...	F2	F2	1884
25·40	...	...	...	1885
18·17	...	...	...	1886
19·02	...	...	...	1887
19·30	...	...	...	1888
30·46	...	...	...	1889
13·93	...	F2	F2	1890
20·13	...	...	...	1891
18·04	...	...	...	1892
24·50	...	...	...	1893

CHITALDRUG

CHITALDRUG

January to July—

Accepted average	10·69
50 % of average	5·35
65 % of average	6·95
75 % of average	8·02

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	9·59	...	...	...
1895	19·91	...	...	...
1896	10·82	...	...	...
1897	12·77	...	...	...
1898	9·68	...	...	...
1899	8·41	...	...	...
1900	7·00	...	...	F1
1901	8·97	...	...	...
1902	6·82	...	F1	F1
1903	13·09	...	...	...
1904	13·37	...	...	...
1905	7·78	...	...	F1
1906	11·21	...	...	...
1907	9·96	...	...	...
1908	10·16	...	...	...
1909	11·65	...	...	...
1910	13·04	...	...	...
1911	6·79	...	F1	F1
12	12·27	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	22·51
50 % of average	11·26
65 % of average	14·63
75 % of average	16·88

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
18·78	...	...	...	 1894
30·05	...	...	...	 1895
18·40	...	...	...	 1896
31·38	...	...	...	 1897
24·40	...	...	...	 1898
15·46	...	...	F2	 1899
14·66	...	...	F2	 1900
19·92	...	...	...	 1901
24·72	...	...	...	 1902
35·12	...	...	...	 1903
22·89	...	...	...	 1904
15·50	...	...	F2	 1905
28·37	...	...	...	 1906
20·21	...	...	...	 1907
15·40	...	...	F2	 1908
23·99	...	...	...	 1909
32·10	...	...	...	 1910
17·99	...	...	...	 1911
26·87	...	...	...	 1912

MINISTRY OF CULTURE · GOVERNMENT OF INDIA
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CHITALDRUG

CHALLAKERE

January to July—

Accepted average	6·77
50 % of average	3·39
65 % of average	4·40
75 % of average	5·08

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1873	7·71	...	...	...
1874	8·43	...	...	...
1875	5·05	...	...	F1
1876	3·25	F1	F1	F1
1877	9·80	...	...	...
1878	6·90	...	...	...
1879	10·89	...	...	...
1880	9·71	...	...	...
1881	3·10	F1	F1	F1
1882	5·91	...	...	...
1883	5·13	...	...	...
1884	5·10	...	...	...
1885	10·72	...	...	...
1886	3·82	...	F1	F1
1887	5·19	...	...	...
1888	13·94	...	...	...
1889	5·07	...	...	F1
1890	4·46	...	...	F1
1891	4·93	...	...	F1
1892	7·35	...	...	...
1893	17·04	...	...	...
1894	7·50	...	...	...
1895	7·23	...	...	...
1896	13·57	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	15·27
50 % of average	7·64
65 % of average	9·93
75 % of average	11·45

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
19·56	...	...	...	1873
24·23	...	...	...	1874
8·45	...	F2	F2	1875
4·25	F2	F2	F2	1876
21·21	...	...	...	1877
17·50	...	...	...	1878
15·71	...	...	...	1879
24·98	...	...	...	1880
7·40	F2	F2	F2	1881
15·66	...	...	...	1882
17·87	...	...	...	1883
11·47	...	...	...	1884
21·88	...	...	...	1885
13·51	...	...	...	1886
12·57	...	...	...	1887
18·30	...	...	...	1888
18·03	...	...	...	1889
12·49	...	...	...	1890
8·21	...	F2	F2	1891
12·90	...	...	...	1892
25·36	...	...	...	1893
15·28	...	...	...	1894
16·22	...	...	...	1895
18·31	...	...	...	1896

CHITALDRUG

CHALLAKERE

January to July—

Accepted average	6·77
50 % of average	3·39
65 % of average	4·40
75 % of average	5·08

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1897	6·45	...	...	...
1898	4·58	...	...	F1
1899	13·83	...	...	...
1900	6·01	...	...	...
1901	7·98	...	...	...
1902	3·52	...	F1	F1
1903	5·72	...	...	...
1904	5·20	...	...	...
1905	3·57	...	F1	F1
1906	3·53	...	F1	F1
1907	7·71	...	...	...
1908	7·64	...	...	...
1909	5·84	...	...	...
1910	7·57	...	...	...
1911	9·50	...	...	...
1912	2·95	F1	F1	F1

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	15·27
50 % of average	7·64
65 % of average	9·93
75 % of average	11·45

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
21·64	...	...	...	1897
11·96	...	...	...	1898
23·87	...	...	...	1899
10·90	...	...	F2	1900
15·57	...	...	...	1901
15·38	...	...	...	1902
23·24	...	...	...	1903
12·86	...	...	...	1904
7·83	...	F2	F2	1905
20·85	...	...	...	1906
13·95	...	...	...	1907
10·35	...	...	F2	1908
15·93	...	...	...	1909
18·81	...	...	...	1910
12·89	...	...	...	1911
16·33	...	...	...	1912

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CHITALDRUG

HIRIYUR

January to July—

Accepted average	7·78
50 % of average	3·89
65 % of average	5·06
75 % of average	5·84

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1874	8·61	...	...	...
1875	3·97	...	F1	F1
1876	4·87	...	F1	F1
1877	5·55	...	...	F1
1878	8·86	...	...	...
1879	15·80	...	...	...
1880	9·95	...	...	...
1881	3·65	F1	F1	F1
1882	8·38	...	...	...
1883	Not	available		
1884	5·95	...	...	...
1885	5·77	...	...	F1
1886	6·67	...	...	...
1887	4·25	...	F1	F1
1888	5·90	...	...	...
1889	5·37	...	...	F1
1890	4·23	...	F1	F1
1891	3·61	F1	F1	F1
1892	12·80	...	...	...
1893	13·93	...	...	...
1894	6·40	...	...	...
1895	12·34	...	...	...
1896	5·90	...	...	...
1897	5·75	...	...	F1

DISTRICT.

TALUK.

January to October—

Accepted average	16·71
50 % of average	8·36
65 % of average	10·86
75 % of average	12·53

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
19·93	...	...	...	 1874
7·60	F2	F2	F2	 1875
5·17	F2	F2	F2	 1876
26·24	...	...	...	 1877
14·94	...	...	...	 1878
20·10	...	...	...	 1879
23·78	...	...	...	 1880
12·70	...	...	...	 1881
17·68	...	...	...	 1882
Not	available			 1883
10·73	...	F2	F2	 1884
14·39	...	...	...	 1885
11·77	...	...	F2	 1886
9·34	...	F2	F2	 1887
13·32	...	...	...	 1888
20·12	...	...	...	 1889
11·20	...	...	F2	 1890
5·66	F2	F2	F2	 1891
15·23	...	...	...	 1892
21·88	...	...	...	 1893
11·95	...	...	F2	 1894
22·44	...	...	...	 1895
9·89	...	F2	F2	 1896
22·36	...	...	...	 1897

CHITALDRUG

HIRIYUR

January to July—

Accepted average	7·78
50 % of average	3·89
65 % of average	5·06
75 % of average	5·84

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1898	7·00	...	...	...
1899	7·80	...	...	...
1900	9·56	...	...	...
1901	4·93	...	F1	F1
1902	8·28	...	...	...
1903	9·14	...	...	...
1904	5·73	...	...	F1
1905	7·16	...	...	...
1906	8·82	...	...	...
1907	11·95	...	...	...
1908	6·67	...	...	...
1909	14·14	...	...	...
1910	14·22	...	...	...
1911	13·62	...	...	..
1912	9·09	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	16·71
50 % of average	8·36
65 % of average	10·86
75 % of average	12·53

Rainfall Jan. to Oct	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·60	...	...	...	 1898
23·32	...	...	...	 1899
15·24	...	...	...	 1900
12·15	...	...	F2	 1901
19·07	...	...	...	 1902
18·84	...	...	...	 1903
12·71	...	...	...	 1904
15·01	...	...	...	 1905
20·95	...	...	...	 1906
20·40	...	...	...	 1907
11·46	...	...	F2	 1908
23·30	...	...	...	 1909
34·04	...	...	...	 1910
24·85	...	...	...	 1911
20·53	...	...	...	 1912

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CHITALDRUG

HOLALKERE

January to July—

Accepted average	10·11
50 % of average	5·06
65 % of average	6·57
75 % of average	7·58

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1874	19·19	...	...	...
1875	5·65	..	F1	F1
1876	5·80	...	F1	F1
1877	5·43	...	F1	F1
1878	8·84	...	...	...
1879	15·80	..	...	..
1880	14·24	...	...	...
1881	2·74	F1	F1	F1
1882	11·71	...	...	...
1883	14·46	...	...	...
1884	6·68	...	...	F1
1885	8·67	...	...	...
1886	7·95	...	...	...
1887	8·52	...	...	..
1888	13·82	...	...	...
1889	7·18	...	...	F1
1890	8·33	...	...	...
1891	11·24	...	...	...
1892	10·61	...	...	...
1893	13·63	...	...	...
1894	18·36	...	...	...
1895	9·50	...	...	...
1896	11·13	...	...	...
1897	11·23	...	..	...

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TALUK.

January to October—

Accepted average	22·01
50 % of average	11·01
65 % of average	14·31
75 % of average	16·51

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
32·19	...	...	...	 1874
8·50	F2	F2	F2	 1875
10·70	F2	F2	F2	 1876
22·89	...	...	...	 1877
17·34	...	...	...	 1878
20·88	...	...	...	 1879
25·46	...	...	...	 1880
6·96	F2	F2	F2	 1881
19·40	...	...	...	 1882
32·33	...	...	...	 1883
17·45	...	...	...	 1884
25·94	...	...	...	 1885
21·08	...	...	...	 1886
24·30	...	...	...	 1887
22·31	..	...	...	 1888
17·56	...	...	...	 1889
15·61	...	...	F2	 1890
21·80	...	...	...	 1891
16·67	...	...	...	 1892
27·63	...	...	...	 1893
29·92	...	..	...	 1894
19·41	...	...	...	 1895
19·30	...	...	...	 1896
25·69	...	...	..	 1897

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CHITALDRUG

HOLALKERE

January to July—

Accepted average	10·11
50 % of average	5·06
65 % of average	6·57
75 % of average	7·58

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1898	7·65	...	...	...
1899	17·28	...	...	...
1900	8·35	...	...	...
1901	10·44	...	...	...
1902	6·34	...	F1	F1
1903	15·93	...	...	...
1904	9·56	...	...	...
1905	6·13	...	F1	F1
1906	6·99	...	...	F1
1907	12·35	...	...	...
1908	12·35	...	...	...
1909	14·98	...	...	...
1910	9·79	...	...	...
1911	7·25	...	...	F1
1912	11·21	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	22·01
50 % of average	11·01
65 % of average	14·31
75 % of average	16·51

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis		Year
24·81	...	...	...	...	... 1898
26·06	...	...	...	...	... 1899
16·91	...	...	...	...	... 1900
19·45	...	...	...	...	... 1901
17·31	...	...	...	...	... 1902
27·47	...	...	...	...	... 1903
17·32	...	...	...	...	... 1904
20·04	...	...	...	...	... 1905
25·85	...	...	...	...	... 1906
21·60	...	...	...	...	... 1907
17·39	...	...	...	...	... 1908
30·05	...	...	...	...	... 1909
25·84	...	...	...	...	... 1910
17·24	...	...	...	...	... 1911
25·93	...	...	...	...	... 1912

CHITALDRUG

DAVANGERE

January to July—

Accepted average	9·45
50 % of average	4·73
65 % of average	6·29
75 % of average	7·10

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1875	9·88	...	...	...
1876	5·75	...	F1	F1
1877	Not available			
1878	7·54	...	...	...
1879	Not available			
1880	9·17	...	...	...
1881	4·44	F1	F1	F1
1882	9·63	...	...	...
1883	10·19	...	...	...
1884	4·88	...	F1	F1
1885	9·33	...	...	...
1886	9·51	...	...	...
1887	6·29	...	...	F1
1888	13·09	...	...	...
1889	9·55	...	...	...
1890	8·57	...	...	...
1891	10·17	...	...	...
1892	6·65	...	...	F1
1893	17·72	...	...	...
1894	10·30	...	...	...
1895	7·07	...	...	F1
1896	9·69	...	...	...
1897	10·97	...	...	...
1898	10·52	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	20·75
50 % of average	10·38
65 % of average	13·49
75 % of average	15·56

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
12·13	...	F2	F2	 1875
8·65	F2	F2	F2	 1876
Not	available			 1877
20·01	...	...	...	 1878
Not	available			 1879
25·37	...	...	...	 1880
10·12	F2	F2	F2	 1881
19·29	...	...	...	 1882
26·14	...	...	...	 1883
11·18	...	F2	F2	 1884
20·32	...	...	...	 1885
19·99	...	...	...	 1886
17·23	...	...	...	 1887
22·84	...	...	...	 1888
24·35	...	...	...	 1889
15·72	...	...	...	 1890
13·75	...	...	F2	 1891
21·45	...	...	...	 1892
32·56	...	...	...	 1893
20·50	...	...	...	 1894
18·93	...	...	...	 1895
19·83	...	...	...	 1896
26·31	...	...	...	 1897
31·16	...	...	...	 1898

CHITALDRUG

DAVANGERE

January to July—

Accepted average	9·45
50 % of average	4·73
65 % of average	6·29
75 % of average	7·10

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1899	13·70	...	...	...
1900	11·46	...	...	...
1901	17·46	...	...	...
1902	14·61	...	...	...
1903	14·53	...	...	...
1904	12·16	...	...	...
1905	8·37	...	...	...
1906	9·39	...	...	...
1907	9·69	..	...	...
1908	5·55	...	F1	F1
1909	9·24	...	...	...
1910	14·42	...	...	...
1911	7·65	...	...	...
1912	10·25	...	...	...

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TALUK—*concld.*

January to October—

Accepted average	20·75
50 % of average	10·38
65 % of average	13·49
75 % of average	15·56

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
23·07	...	...	...	1899
20·94	...	...	...	1900
26·53	...	...	...	1901
28·26	...	...	...	1902
30·76	...	...	...	1903
22·85	...	...	...	1904
24·82	...	...	...	1905
22·93	...	...	...	1906
20·65	...	...	...	1907
11·51	...	F2	F2	1908
24·09	...	...	...	1909
29·18	...	...	...	1910
16·28	...	...	...	1911
31·01	...	...	...	1912

CHITALDRUG

MOLAKALMURU

January to July—

Accepted average	7·30
50 % of average	3·65
65 % of average	4·75
75 % of average	5·48

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1886	5·95	...	...	...
1887	2·95	F1	F1	F1
1888	9·10	...	...	...
1889	3·50	F1	F1	F1
1890	7·80	...	...	...
1891	4·46	...	F1	F1
1892	19·02	...	...	...
1893	26·12	...	...	...
1894	18·30	...	...	...
1895	25·55	...	...	...
1896	7·75	...	...	...
1897	5·16	...	...	F1
1898	9·01	...	...	...
1899	5·21	...	...	F1
1900	11·47	...	...	...
1901	12·36	...	...	...
1902	5·71	...	...	...
1903	7·44	...	...	...
1904	6·63	...	...	...
1905	8·47	...	...	...
1906	8·64	...	...	...
1907	7·76	...	...	...
1908	11·13	...	...	...
1909	11·33	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	20·28
50 % of average	10·14
65 % of average	13·18
75 % of average	15·21

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
12·70	...	F2	F2	1886
15·15	...	...	F2	1887
22·65	...	...	...	1888
23·10	...	...	...	1889
15·80	...	...	...	1890
7·76	F2	F2	F2	1891
20·52	...	...	...	1892
29·42	...	...	...	1893
20·73	...	...	...	1894
32.10	...	...	...	1895
9·36	F2	F2	F2	1896
31·09	...	...	...	1897
21·52	...	...	...	1898
17·00	...	...	...	1899
21·01	...	...	...	1900
20·62	...	...	...	1901
23·88	...	...	...	1902
28·99	...	...	...	1903
16·86	...	...	...	1904
16·54	...	...	...	1905
27·53	...	...	...	1906
18·41	...	...	...	1907
22·96	...	...	...	1908
22·52	...	...	...	1909

CHITALDRUG

MOLAKALMURU

January to July—

Accepted average	7·30
50 % of average	3·65
65 % of average	4·75
75 % of average	5·48

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1910	12·26	...	...	...
1911	4·41	...	F1	F1
1912	9·35	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	20·28
50 % of average	10·14
65 % of average	13·18
75 % of average	15·21

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
28·94	...	...	...	 1910
12·21	...	F2	F2	 1911
31·34	...	...	...	 1912

CHITALDRUG

JAGALUR

January to July—

Accepted average	7·83
50 % of average	3·92
65 % of average	5·09
75 % of average	5·87

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1870	2·47	F1	F1	F1
1871	6·69	...	...	...
1872	7·33	...	...	...
1873	5·66	...	...	F1
1874	14·88	...	...	...
1875	11·95	...	...	...
1876	3·43	F1	F1	F1
1877	6·22	...	...	...
1878	6·71	...	...	...
1879	11·80	...	...	...
1880	5·49	...	...	F1
1881	12·34	...	...	...
1882	8·05	...	...	...
1883	Not available			
1884	Not available			
1885	5·75	...	...	F1
1886	7·79	...	...	...
1887	3·18	F1	F1	F1
1888	10·53	...	...	...
1889	3·38	F1	F1	F1
1890	6·59	...	...	...
1891	5·04	...	F1	F1
1892	9·07	...	...	...
1893	11·49	...	...	...

DISTRICT.

TALUK.

January to October—

Accepted average	18·71
50 % of average	9·36
65 % of average	12·16
75 % of average	14·03

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
10·66	...	F2	F2	1870
17·21	...	...	...	1871
20·63	...	...	...	1872
21·73	...	...	...	1873
37·11	...	...	...	1874
19·75	...	...	...	1875
4·18	F2	F2	F2	1876
12·33	...	...	F2	1877
14·89	...	...	...	1878
19·95	...	...	...	1879
19·16	...	...	...	1880
19·45	...	...	...	1881
15·60	...	...	...	1882
Not	available			1883
Not	available			1884
20·99	...	...	...	1885
14·12	...	...	...	1886
12·61	...	...	F2	1887
15·19	...	...	...	1888
15·81	...	...	...	1889
14·31	...	...	...	1890
10·39	...	F2	F2	1891
18·31	...	...	...	1892
26·19	...	...	...	1893

CHITALDRUG

JAGALUR

January to July—

Accepted average	7·83
50 % of average	3·92
65 % of average	5·09
75 % of average	5·87

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1894	5·71	...	...	F 1
1895	5·47	...	...	F 1
1896	11·64	...	...	...
1897	10·70	...	...	...
1898	11·55	...	...	...
1899	6·79	...	...	...
1900	12·59	...	...	...
1901	13·76	...	...	...
1902	10·94	...	...	...
1903	12·42	...	...	...
1904	8·95	...	...	...
1905	8·12	...	...	...
1906	7·68	...	...	...
1907	8·51	...	...	...
1908	5·92	...	...	...
1909	11·11	...	...	...
1910	11·24	...	...	...
1911	3·85	F1	F1	F1
1912	9·44	...	...	...

CSL

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	18·71
50 % of average	9·36
65 % of average	12·16
75 % of average	14·03

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
13·85	...	...	F2	1894
17·58	...	...	...	1895
20·15	...	...	...	1896
25·18	...	...	...	1897
22·46	...	...	...	1898
18·52	...	...	...	1899
19·85	...	...	...	1900
21·18	...	...	...	1901
23·00	...	...	...	1902
29·25	...	...	...	1903
19·62	...	...	...	1904
13·42	...	...	F2	1905
20·64	...	...	...	1906
15·42	...	...	...	1907
13·42	...	...	F2	1908
20·30	...	...	...	1909
28·44	...	...	...	1910
13·15	...	...	F2	1911
31·35	...	...	...	1912

CHITALDRUG

HOSDURGA

January to July—

Accepted average	10·08
50 % of average	5·04
65 % of average	6·55
75 % of average	7·56

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1883	...	...	...	...
1884	6·65	...	...	F1
1885	5·65	...	F1	F1
1886	12.42	...	...	...
1887	6·37	...	F1	F1
1888	6·70	...	...	F1
1889	4·96	F1	F1	F1
1890	9·55	...	...	...
1891	11·51	...	...	...
1892	10·73	...	...	...
1893	16·70	...	...	...
1894	14·15	..	...	...
1895	13·60	...	...	...
1896	8·10	...	....	...
1897	6·90	...	...	F1
1898	10·04	...	...	...
1899	3·79	F1	F1	F1
1900	10·71	...	...	...
1901	7·65	...	...	...
1902	4·22	F1	F1	F1
1903	17·26	...	...	...
1904	11·34	...	...	..
1905	9·01	...	...	...
1906	6·95	...	...	F1

DISTRICT.

TALUK.

January to October—

Accepted average	19·86
50 % of average	9·93
65 % of average	12·91
75 % of average	14·90

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
17·95	...	...	...	 1883
14·65	...	...	F 2	 1884
24·81	...	...	...	 1885
24·37	...	...	...	 1886
15·42	...	...	...	 1887
18·15	...	...	...	 1888
13·58	...	...	F 2	 1889
15·00	...	...	...	 1890
18·06	...	...	...	 1891
16·38	...	...	...	 1892
25·95	...	...	...	 1893
19·50	...	...	...	 1894
21·75	...	...	...	 1895
11·45	...	F 2	F 2	 1896
24·70	...	...	...	 1897
26·80	...	...	...	 1898
10·80	...	F 2	F 2	 1899
17·40	...	...	...	 1900
16·31	...	...	...	 1901
16·18	...	...	...	 1902
26·41	...	...	...	 1903
16·41	...	...	...	 1904
19·29	...	...	...	 1905
30·24	...	...	...	 1906

CHITALDRUG

HOSDURGA

January to July—

Accepted average	10·08
50 % of average	5·04
65 % of average	6·55
75 % of average	7·56

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1907	8·69	...	...	...
1908	10·51	...	...	...
1909	15·05	...	...	...
1910	15·49	..	...	...
1911	8·10	...	...	...
1912	15·83	...	...	...

DISTRICT.

TALUK—*concld.*

January to October—

Accepted average	19·86
50 % of average	9·93
65 % of average	12·91
75 % of average	14·90

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
15·52	...	...	..	 1907
13·32	...	...	F 2	 1908
23·50	...	...	...	 1909
34·65	...	...	...	 1910
20·92	...	...	...	 1911
30·58	...	...	...	... 1912

CHITALDRUG

HARIHAR

January to July—

Accepted average	9·08
50 % of average	4·54
65 % of average	5·90
75 % of average	6·81

Year	Rainfall Jan. to July	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis
1892	9·49	...	...	...
1893	9·59	...	...	...
1894	5·12	...	F1	F1
1895	7·39	...	...	...
1896	10·94	...	...	...
1897	9·13	...	...	...
1898	11·33	...	...	...
1899	7·33	...	...	...
1900	6·92	...	...	...
1901	14·37	..	...	...
1902	11·28	...	...	...
1903	11·32	...	...	..
1904	12·28	...	...	...
1905	4·33	F1	F1	F1
1906	11·57	...	...	...
1907	7·33	...	...	...
1908	4·25	F1	F1	F1
1909	6·53	...	...	F1
1910	13·97	...	...	...
1911	5·01	...	F1	F1
1912	11·44	...	...	...

DISTRICT.

SUB-TALUK.

January to October—

Accepted average	19·64
50 % of average	9·82
65 % of average	12·77
75 % of average	14·73

Rainfall Jan. to Oct.	Failures 50 % basis	Failures 65 % basis	Failures 75 % basis	Year
19·91	...	...	...	 1892
18·33	...	...	...	 1893
11·73	...	F2	F2	 1894
17·95	...	...	...	 1895
17·16	...	...	...	 1896
22·06	...	...	...	 1897
28·33	...	...	...	 1898
13·75	...	...	F2	 1899
12·82	...	...	F2	 1900
30·26	...	...	...	 1901
23·26	...	...	...	 1902
23·50	...	...	...	 1903
18·60	...	...	...	 1904
17·66	...	...	...	 1905
27·65	...	...	...	 1906
17·30	...	...	...	 1907
10·43	...	F2	F2	 1908
17·53	...	...	...	 1909
26·21	..	...	...	 1910
12·65	...	F2	F2	 1911
25·74	...	...	...	 1912

APPENDIX III.

A LIST OF TALUKS IN THE MYSORE STATE SHOWING THE RAIN-INSURANCE AREA IN WHICH EACH TALUK IS SITUATED.

Names of districts and taluks	Proportionate number of deficiency periods in 40 years	Area in which it falls	Remarks
BANGALORE DISTRICT.			
Bangalore	9	11±2	
Hoskote*	5	11±2	*According to data for 28 years the result is 7 ±2. But this is obviously erratic and on the basis of larger experience the taluk is sure to come under the group 11± 2. It is surrounded on all sides by such areas.
Dodballapur	11	11±2	
Nelamangala	12	11±2	
Kankanhalli	13	11±2	
Magadi	12	11±2	
Closepet †	...	11±2	†Only 20 years' figures are available which do not give a reliable result.
Anekal	11	11±2	
Devanhalli	9	11±2	
Channapatna ‡	4	11±2	‡Only 19 years' figures are available which do not give a reliable result. But since it is surrounded by areas of 11±2, this also is included under the group 11±2.
KOLAR DISTRICT.			
Kolar	9	11±2	
Bowringpet¶	8	11±2	¶Only 20 years' figures are available which do not give a quite reliable result.
Chintamani	10	11±2	
Mulbagal	10	11±2	
Sidlaghatta	13	11±2	
Chikballapur	10	11±2	
Bagepalli	10	11±2	
Goribidnur	12	11±2	
Malur §	4	11±2	§Only 20 years' figures are available which do not give a reliable result. But since it is surrounded by areas of 11±2, it is included in that group.
Srinivasapur	13	11±2	
Gudibanda	13	11±2	

GSL

Names of districts and taluks	Proportionate number of deficiency periods in 40 years	Area in which it falls	Remarks
TUMKUR DISTRICT.			
Tumkur	11	11±2	
Maddagiri	9	11±2	
Chiknayakanhalli	13	11±2	
Sira*	14	11±2	*Slightly in excess of the maximum limit.
Gubbi	11	11±2	
Tiptur	9	11±2	
Pavagada	11	11±2	
Kunigal	9	11±2	
Koratagere	10	11±2	
Turuvekere	12	11±2	
MYSORE DISTRICT.			
Mysore	9	11±2	
Chamarajnagar†	14	11±2	†Slightly in excess of the maximum limit.
Seringapatam	9	11±2	
Hunsur‡	4	7±2	‡*Vide* page 115 for reasons why this taluk is placed in the 7±2 area.
Yedatore	10	11±2	
Heggaddevankote	11	11±2	
Gundlupet	9	11±2	
Nanjangud	12	11±2	
T.-Narsipur	11	11±2	
Malavalli¶	14	11±2	¶Slightly in excess of the maximum limit.
Mandya	11	11±2	
Krishnarajpet	12	11±2	
Nagamangala	11	11±2	
HASSAN DISTRICT.			
Hassan	8	7±2	
Manjarabad	2	3±1	

CSL

Names of districts and taluks	Proportionate number of deficiency periods in 40 years	Area in which it falls	Remarks
HASSAN DISTRICT—*concld.*			
Arkalgud	3	3±1	
Belur	5	7±2	
Channarayapatna ...	6	7±2	
Arsikere	6	7±2	
Hole-Narsipur	5	7±2	
Alur	4	3±1	
SHIMOGA DISTRICT.			
Shimoga	5	7±2	
Channagiri	8	7±2	
Honnali	5	7±2	
Shikarpur	9	7±2	
Sorab	9	7±2	
Sagar	7	7±2	
Nagar*	1	3±1	*This taluk which is the one of maximum rainfall in the State (average 200·95 inches a year) presents an abnormally low figure and the real frequency is perhaps less than 3±1. If it has to be included in our scheme, however, it must go in the class 3±1.
Tirthahalli	2	3±1	
Kumsi	3	3±1	
KADUR DISTRICT.			
Chikmagalur	7	7±2	
Kadur	11	11±2	
Tarikere†	4	7±2	†The figure for Tarikere is 4 but with longer experience the taluk will probably come under the group 7±2
Koppa	3	3±1	
Mudgere	2	3±1	
Narasimharajapura (Yedahalli) ...	2	3±1	
Sringeri	4	3±1	
CHITALDRUG DISTRICT.			
Chitaldrug	9	11±2	

CSL

Names of districts and taluks	Proportionate number of deficiency periods in 40 years	Area in which it falls	Remarks
CHITALDRUG DISTRICT—*concld.*			
Challakere	12	11±2	
Hiriyur	13	11±2	
Holalkere	9	11±2	
Davangere	10	11±2	
Molakalmuru	12	11±2	
Jagalur	9	11±2	
Hosdurga	10	11±2	
Harihar	13	11±2	

APPENDIX IV.

FINANCIAL RESULTS TO THE MYSORE STATE OF THE AGRICULTURAL INSURANCE SCHEME IF IT HAD BEEN IN FORCE FROM 1898 TO 1907.

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BANGALORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
BANGALORE TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1	...	34,823	1,39,292	...
1899	−1,05,745	34,621	...	...
1900	−74,315	34,461	...	...
1901	−41,792	34,181	...	...
1902	−8,257	34,269	...	...
1903 F1	26,709	34,446	1,37,784	...
1904	−76,823	34,413	...	...
1905	−4,450	34,399	...	...
1906	30,803	34,399*	...	...
1907	67,466	39,342	...	...
Total		3,49,354		
HOSKOTE TALUK				
1898 F1	...	30,553	1,22,212	...
1899	−92,779	29,912	...	...
1900 F1	−65,680	29,739	1,18,956	...
1901	−1,58,614	30,287	...	...
1902	−1,33,762	31,218	...	...
1903	-1,06,957	31,526	...	...
1904	−78,763	31,518	...	...
1905	−49,449	31,249	...	...
1906	−19,240	31,249*	...	...
1907	11,842	32,316	...	...
Total		3,09,567		

---

* Figure for 1906 not being

DISTRICT.

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	BANGALORE TALUK
1,39,292	—1,276	—1,05,745	... ... F1 1898
	—3,191	—74,315	 1899
...	—1,938	—41,792	 1900
...	—646	—8,257	 1901
...	697	26,709	 1902
1,37,784	—194	—76,823	... ... F1 1903
...	—2,040	—4,450	 1904
...	854	30,803	 1905
...	2,264	67,466	 1906
...	3,879	1,10,687	 1907
2,77,076	—1,591		... Total
			HOSKOTE TALUK
1,22,212	—1,120	—92,779	... ... F1 1898
...	—2,813	—65,680	 1899
1,18,956	—3,717	—1,58,614	... ... F1 1900
...	—5,435	—1,33,762	 1901
..	—4,413	—1,06,957	 1902
...	—3,332	—78,763	 1903
...	—2,204	—49,449	 1904
...	—1,040	—19,240	 1905
...	—167	11,842	 1906
...	1,443	45,601	 1907
2,41,168	—22,798		... Total

available, 1905 figure is taken.

CSL

BANGALORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
DODBALLAPUR TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	32,668	...	...
1899	33,648	32,317	...	...
1900	68,280	32,231	...	...
1901	1,04,209	32,244	...	...
1902	1,41,589	33,543	...	...
1903	1,81,802	35,270	...	...
1904	2,25,402	35,499	...	...
1905	2,70,982	35,291	...	...
1906	3,18,171	35,291*	...	...
1907	3,67,248	32,751	...	...
Total ...		3,37,105		
NELAMANGALA TALUK				
1898	...	29,612	...	...
1899	30,500	29,600	...	...
1900	62,208	29,544	...	...
1901	95,126	29,663	...	...
1902	1,29,483	27,554	...	...
1903	1,63,042	30,119	...	...
1904	2,00,586	30,243	...	...
1905	2,39,759	30,232	...	...
1906	2,80,488	30,232*	...	...
1907 F2	3,22,846	28,734	...	1,14,936
Total ...		2,95,533		

---

* Figure for 1906 not being

DISTRICT—*contd.*

paid	Interest addition $\frac{12h+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	DODBALLAPUR TALUK
...	980	33,648	 1898
...	2,315	68,280	 1899
...	3,698	1.04,209	 1900
...	5,136	1,41,589	 1901
...	6,670	1,81,802	 1902
...	8,330	2,25,402	 1903
...	10,081	2,70,982	 1904
...	11,898	3,18,171	 1905
...	13,786	3,67.248	 1906
...	15,672	4,15,671	 1907
	78,566		... Total
			NELAMANGALA TALUK
...	888	30,500	 1898
...	2,108	62.208	 1899
...	3,374	95,126	 1900
...	4,694	1,29,483	 1901
...	6,005	1,63,042	 1902
...	7.425	2.00,586	 1903
...	8,930	2.39,759	 1904
...	10.497	2.80,488	 1905
...	12,126	3,22,846	 1906
1,14,936	13,009	2,40,653	... ... F2 1907
1,14,936	69,056		... Total

available, 1905 figure is taken.

BANGALORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	b	c	d	e
KANKANHALLI TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	20,769	...	...
1899 F1 F2	21,392	20,866	83,464	83,464
1900	—1,25,135	21,082	...	...
1901	—1,08,425	21,767	...	...
1902	—90,341	21,961	...	...
1903	—71,334	22,275	...	...
1904	—51,244	22,479	...	...
1905	—30,140	22,578	...	...
1906	—8,090	22,578*	...	...
1907	14,841	22,814	...	...
Total ...		2,19,169		
MAGADI TALUK				
1898	...	28,019	...	...
1899 F1	28,859	28,012	1,12,048	...
1900	—55,050	27,922	...	...
1901	—28,492	28,126	...	...
1902 F1	—661	28,578	1,14,312	...
1903	—87,469	28,860	...	...
1904	—61,241	29,009	...	...
1905	—33,811	29,102	...	...
1906	—5,188	29,102*	...	...
1907	24,579	29,211	...	...
Total ...		2,85,941		

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* Figures for 1906 not being

DISTRICT—*contd.*

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	KANKANHALLI TALUK
...	623	21,392	 1898
1,66,928	—465	—1,25,135	... ... F1 F2 1899
...	—4,372	—1,08,425	 1900
...	—3,683	—90,341	 1901
...	—2,954	—71,334	 1902
...	—2,185	—51,244	 1903
...	—1,375	—30,140	 1904
...	—528	—8,090	 1905
...	353	14,841	 1906
..	1,278	38,933	 1907
1,66,928	—13,308		... Total
			MAGADI TALUK
...	840	28,859	 1899
1,12,048	127	-55,050	... ... F1 1899
...	-1,364	—28,492	 1900
...	—295	—661	 1901
1,14,312	—1,074	—87,469	... ... F1 1902
...	—2,632	—61.241	 1903
...	—1,579	—33,811	 1904
..	—479	—5,188	 1995
...	665	24,579	 1906
...	1,859	55,649	 1907
2,26,360	—3,932		... Total

available, 1905 figure is taken.

BANGALORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
ANEKAL TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1	..	28,213	1,12,852	...
1899	—85,673	28,093	...	...
1900	—60,164	27,674	...	...
1901	34,066	27,629	...	...
1902 F1	—6,970	27,723	1,10,892	...
1903	—91,434	27,829	...	...
1904	—66,427	27,787	...	...
1905	—40,463	27,724	...	...
1906	—13,525	27,724*	...	...
1907	14,489	27,859	...	...
Total ...		2,78,255		
DEVANHALLI TALUK				
1898 F1	...	24,048	96,192	...
1899	—73,025	24,101	...	...
1900 F1	—51,121	24,241	96,964	...
1901	—1,26,777	24,722	...	...
1902	—1,06,384	25,756	...	...
1903	—84,110	25,720	...	...
1904	—60,982	25,612	...	...
1905	—37,040	25,186	...	...
1906	—12,580	25,186*	...	...
1907	12,858	24,586	...	...
Total ...		2,49,158		

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* Figure for 1906 not being

CSL

DISTRICT—*contd.*

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	ANEKAL TALUK.
1,12,852	—1,034	—85,673	... ... F1 1898
...	—2,584	—60,164	 1899
...	—1,576	—34,066	 1900
...	—533	—6,970	 1901
1,10,892	—1,295	—91,434	... ... F2 1902
...	—2,882	—66,427	 1903
...	—1,823	—40,463	 1904
...	—786	—13,525	 1905
...	290	14,489	 1906
...	1,415	43,763	 1907
2,23,744	—10,748		... Total
			DEVANHALLI TALUK.
96,192	—881	—73,025	... ... F1 1898
...	—2,197	—51,121	 1899
96,964	—2,933	—1,26,777	... ... F1 1900
...	—4,329	—1,06,384	 1901
...	—3,482	—84,110	 1902
...	—2,592	—60,982	 1903
...	—1,670	—37,040	 1904
...	—726	—12,580	 1905
...	252	12,853	 1906
...	1,251	38,695	 1907
1,93,156	—17,307		... Total

available, 1905 figure is taken.

BANGALORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
CHANNAPATNA TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	32,552	...	...
1899 F1	33,528	32,762	1,31,048	...
1900	—64,619	32,755	...	...
1901	—33,466	32,834	...	...
1902	—985	32,905	...	...
1903	32,867	33,034	...	...
1904 F2	68,206	33,128	...	1,32,512
1905	—28,340	33,134	..	...
1906	4,655	33,134*	...	...
1907	38,969	33,061	...	...
Total ...		3,29,299		

* Figure for 1906 not being

CSL

DISTRICT—*concld.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	CHANNAPATNA TALUK
...	976	33,528	 1898
1,31,048	139	—64,619	... ... F1 1899
...	—1,602	—33,466	 1900
...	—353	—985	 1901
...	947	32,867	 1902
...	2,305	68,206	 1903
1,32,512	2,838	—28,340	... ... F2 1904
...	—139	4,655	 1905
...	1,180	38,969	 1906
...	2,550	74,580	 1907
2,63,560	8,841		

available, 1905 figure is taken.

KOLAR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	b	c	d	e
KOLAR TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	33,106	...	...
1899	34,099	32,950	...	...
1900	69,401	32,753	...	...
1901	1,05,913	33,667	...	...
1902	1,44,827	34,528	...	...
1903	1,86,184	34,932	...	...
1904	2,29,611	35,164	...	...
1905 F1 F2	2,75,014	35,028	1,40,112	1,40,112
1906	38,600	34,923	...	...
1907	76,115	35,463	...	...
Total ...		3,42,514		
BOWRINGPET TALUK				
1898	...	27,978	...	...
1899	28,817	28,053	...	...
1900	58,864	27,965	...	...
1901	90,023	28,481	...	...
1902	1,22,959	28,796	...	...
1903	1,57,537	29,250	...	...
1904	1,93,966	29,081	...	...
1905 F1	2,31,678	29,106	1,16,424	...
1906	1,52,560	29,077	...	...
1907	1,88,612	29,227	...	...
Total ...		2,87,014		

CSL

DISTRICT.

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	KOLAR TALUK
...	993	34,099	 1898
...	2,352	69,401	 1899
...	3,759	1,05,913	 1900
...	5,247	1,44,827	 1901
...	6,829	1,86,184	 1902
...	8,495	2,29,611	 1903
...	10,239	2,75,014	 1904
2,80,224	8,782	38,600	... F1 F2 1905
...	2,592	76,115	 1906
...	4,108	1,15,686	 1907
2,80,224	53,396		... Total
			BOWRINGPET TALUK
...	839	28,817	 1898
...	1,994	58,864	 1899
...	3,194	90,023	 1900
...	4,455	1,22,959	 1901
...	5,782	1,57,537	 1902
...	7,179	1,93,966	 1903
...	8,631	2,31,678	 1904
1,16,424	8,200	1,52,560	... ... F1 1905
...	6,975	1,88,612	 1906
...	8,421	2,26,260	 1907
1,16,424	55,670		... Total

KOLAR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
CHINTAMANI TALUK	Rs.	Rs.	Rs.	Rs.
1898 F2	...	23,442	...	93,768
1899	−70,248	23,705	...	...
1900	−48,642	23,476	...	...
1901	−26,407	24,027	...	...
1902	−2,715	24,839	...	...
1903	22,761	25,499	...	...
1904	49,935	25,594	...	...
1905	78,294	25,428	...	...
1906	1,07,617	25,374	...	...
1907	1,38,057	25,934	...	...
Total ...		2,47,318		
MULBAGAL TALUK				
1898	...	32,590	...	...
1899	33,568	32,770	...	...
1900	68,664	32,446	...	...
1901	1,04,830	32,872	...	...
1902	1,42,881	33,583	...	...
1903	1,83,187	34,156	...	...
1904	2,25,695	33,806	...	...
1905 F1	2,69,543	33,623	1,34,492	...
1906	1,78,223	33,407	...	...
1907	2,19,761	34,181	...	...
Total ...		3,33,434		

DISTRICT—*contd.*

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year **F1** means failure of rain during Jan. to July and **F2** during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	CHINTAMANI TALUK
93,768	78	—70,248	... ... F2 1898
...	—2,099	—48,642	 1899
...	—1,241	—26,407	 1900
...	—335	—2,715	 1901
...	637	22,761	 1902
...	1,675	49,935	 1903
...	2,765	78,294	 1904
...	3,895	1,07,617	 1905
...	5,066	1,38,057	 1906
...	6,300	1,70,291	 1907
93,768	16,741		... Total
			MULBAGAL TALUK
...	978	33,568	 1898
...	2,326	68,664	 1899
...	3,720	1,04,830	 1900
...	5,179	1,42,881	 1901
...	6,723	1,83,187	 1902
...	8,352	2,25,695	 1903
...	10,042	2,69,543	 1904
1,34,492	9,549	1,78,223	... ... F1 1905
...	8,131	2,19,761	 1906
...	9,816	2,63,758	 1907
1,34,492	64,816		... Total

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
SIDLAGHATTA TALUK	Rs	Rs.	Rs.	Rs.
1898 F1	...	27,259	1,09,036	...
1899	—82,776	27,173	...	...
1900	—58,099	27,173	...	...
1901	—32,435	28,211	...	...
1902	—4,675	28,888	...	...
1903	24,893	30,151	...	...
1904	56,944	30,142	...	...
1905	90,268	29,869	...	...
1906	1,24,644	29,351	...	...
1907	1,59,861	29,758	...	...
Total ...		2,87,975		
CHIKBALLAPUR TALUK				
1898 F1	...	19 813	79,252	..
1899	—60,165	20,008	...	...
1900	—41,963	20,043	...	...
1901	—22,997	20,404	...	...
1902	—2,901	20,956	...	...
1903	18,568	21,414	...	...
1904	41,367	21,275	...	...
1905	64,935	20,868	...	...
1906	89,026	20,601	...	...
1907 F2 ...	1,13,806	21,170	...	84,680
Total ...		2,06,552		

CSL

DISTRICT—*contd.*

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	SIDLAGHATTA TALUK
1,09,036	−999	−82,776	... ... F1 1898
...	−2,496	−58,099	 1899
...	−1,509	−32,435	 1900
...	−451	−4,675	 1901
...	680	24,893	 1902
...	1,900	56,944	 1903
...	3,182	90,268	 1904
...	4,507	1,24,644	 1905
...	5,366	1,59,861	 1906
...	7,287	1,96,906	 1907
1,09,036	17,967		... Total
			CHIKBALLAPUR TALUK
79,252	−726	−60,165	... ... F1 1898
...	−1,806	−41,963	 1899
...	−1,077	−22,997	 1900
...	−308	−2,901	 1901
...	513	18,568	 1902
...	1,385	41,367	 1903
...	2,293	64,935	 1904
...	3,223	89,026	 1905
...	4,179	1,13,806	 1906
84,680	4,623	54,919	... ... F2 1907
1,63,932	12,299		... Total

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
BAGEPALLI TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1 F2... ...	...	28,637	1,14,548	1,14,548
1899 F1	—2,02,273	28,672	1,14,688	...
1900	—2,97,431	28,332	...	...
1901	—2,80,146	29,934	...	...
1902	—2,60,520	31,201	...	...
1903	—2,38,804	32,451	...	...
1904 F2	—2,14,932	32,264	...	1,29,056
1905	—3,20,214	31,041	...	...
1906	—3,01,050	30,294	...	...
1907	—2,81,889	31,512	...	...
Total ...		3,04,338		
GORIBIDNUR TALUK				
1898	...	35,449	...	...
1899 F1	36,512	35,345	1,41,380	...
1900	—69,359	34,921	...	...
1901	—36,165	35,474	...	...
1902	—1,073	35,943	...	...
1903	35,905	36,352	...	...
1904	74,784	36,717	...	...
1905	1,15,594	36,711	...	...
1906	1,58,030	36,579	...	...
1907	2,02,028	36,744	...	...
Total ...		3,60,235		

CSL

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	BAGEPALLI TALUK
2,29,096	—1.814	—2,02,273	... ... F1 F2 1898
1,14,688	-9,124	—2,97,431	... ... F1 1899
...	—11,047	—2,80,146	 1900
...	—10,308	—2,60,520	 1901
...	—9.485	—2,38,804	 1902
...	—8,579	—2,14,932	 1903
1,29,056	—8 490	—3,20 214	... ... F2 1904
...	—11,877	—3.01,050	 1905
...	—11,133	—2,81,889	 1906
...	—10,330	—2,60,707	 1907
4,72,840	—92,205		... Total
			GORIBIDNUR TALUK
...	1,063	36,512	 1898
1,41,380	164	—69,359	... ... F1 1899
...	—1,727	—36,165	 1900
..	—382	—1,073	 1901
...	1,035	35,905	 1902
...	2,527	74,784	 1903
...	4,093	1,15,594	 1904
...	5,725	1,58 030	 1905
...	7,419	2,02,026	 1906
...	9,183	2,47,955	 1907
1,41,380	29,100		... Total

KOLAR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
MALUR TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	24,449	...	...
1899	25,182	24,511	...	...
1900	51,436	24.404	...	...
1901	78,630	24,665	...	...
1902	1,07,180	25,169	...	...
1903	1,37,391	25.451	...	...
1904	1,69,101	25,600	...	...
1905	2,02,233	25,779	...	...
1906	2,36,875	25,852	...	...
1907	2,72,978	26,167	...	...
Total ...		2,52,047		
SRINIVASAPUR TALUK				
1898	...	26,870	...	...
1899	27,676	27.129	...	...
1900	56,726	26,811	...	...
1901	86,610	27,531	...	...
1902	1,18,431	28,631	...	...
1903	1,52,658	29,065	...	...
1904	1,88.701	29,208	...	...
1905	2,26.333	29,047	...	...
1906	2,65,305	28,807	...	...
1907	3,05.588	29,526	...	...
Total ...		2,82,625		

DISTRICT—*concld.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	MALUR TALUK
...	733	25,182	 1898
...	1,743	51,436	 1899
...	2,790	78,630	 1990
...	3,885	1,07,180	 1901
...	5,042	1,37,391	 1902
...	6,259	1,69,101	 1903
...	7,532	2,02,233	 1904
...	8,863	2,36,875	 1905
...	10,251	2,72,978	 1906
...	11,704	3,10,849	 1907
	58,802		... Total
			SRINIVASAPUR TALUK
...	806	27,676	 1898
...	1,921	56,726	 1899
...	3,073	86,610	 1900
...	4,290	1,18,431	 1901
...	5,596	1,52,658	 1902
...	6,978	1,88,701	 1903
...	8.424	2,26,333	 1904
...	9,925	2,65,305	 1905
...	11,476	3,05,588	 1906
...	13,109	3,48,223	 1907
	65,598		... Total

TUMKUR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
TUMKUR TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	42,673	...	...
1899 F1	43,953	43,286	1,73,144	...
1900	—85,735	42,109	...	...
1901	—45,792	42,109*	...	...
1902 F1	—4,251	44,605	1,78,420	...
1903	—1,39,871	44,369	...	...
1904	—99,765	44,240	...	...
1905	—58,188	45,353	...	...
1906	—13,801	45,381	...	...
1907	32,389	45,674	...	...
Total ...		4,39,799		
MADDAGIRI TALUK				
1898	...	49,484	...	...
1899 F1	50,968	35,746	1,42,984	...
1900	—55,542	35,816	...	...
1901	—20,873	35,816*	...	...
1902	15,183	36,569	...	...
1903	53,456	37,159	...	...
1904	93,868	52,766	...	..
1905	1,51,972	38,013	...	..
1906 F1	1,97,204	36,839	1,47,356	...
1907 F2	93,224	52,030	..	2,08,120
Total ..		4,10,238		

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* Figure for 1901 not being

DISTRICT.

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	TUMKUR TALUK
...	1,280	43,953	 1898
1,73,144	170	—85,735	... ... F1 1899
...	—2,166	—45,792	 1900
...	—568	—4,251	 1901
1,78,420	—1,805	—1,39,871	... ... F1 1902
...	—4,263	—99,765	 1903
...	—2,663	—58,188	 1904
...	—966	—13,801	 1905
...	809	32,389	 1906
...	2,665	80,728	 1907
3,51,564	—7,507		... Total
			MADDAGIRI TALUK
...	1,484	50,968	 1898
1,42,984	728	—55,542	... ... F1 1899
...	—1,147	—20,873	 1900
...	240	15,183	 1901
...	1,704	53,456	 1902
...	3,253	93,868	 1903
...	5,338	1,51,972	 1904
...	7,219	1,97.204	 1905
1,47,356	6.537	93,224	... ... F1 1906
2,08,120	3,902	—58,964	... ... F2 1907
4,98,460	29,258		... Total

available, 1900 figure is taken.

TUMKUR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
CHIKNAIKANHALLI TK.	Rs.	Rs.	Rs.	Rs.
1898	...	29,741	...	...
1899	30,633	29,741*	...	...
1900 F1	62,491	29,741*	1,18,964	...
1901	—25,323	29,705	...	...
1902	4,353	30,116	...	...
1903	35,546	30,116†	...	...
1904	67,987	27,293	...	...
1905	98,818	27,490	...	...
1906	1,31,085	27,627	...	...
1907	1,64,784	27,560	...	...
Total ...		2,89,220		
SIRA TALUK				
1898	...	32,928	...	...
1899 F1	33,915	33,042	1,32,168	...
1900	—65,066	33,042‡	...	...
1901	—33,635	33,042‡		...
1902	—947	33,042‡	...	...
1903	33,048	33,042‡	...	...
1904 F1 F2	68,403	34,042	1,36,168	1,36,168
1905 F2	—1,69,311	34,042§	...	1,36,168
1906	—2,73,095	33,964	...	...
1907 F2	—2,54,235	34,451	...	1,37,804
Total ...		3,34,637		

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* Figure for 1899 and 1900 not
† Figure for 1903 not being
‡ Figure for 1900 to 1903 not
§ Figure for 1905 not being

DISTRICT—*contd.*

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	CHIKNAYAKANHALLI TK.
...	892	30,633	 1898
...	2,117	62,491	 1899
1,18,964	1,409	—25,323	... ... F1 1900
...	—119	4,353	 1901
...	1,077	35,546	 1902
...	2,325	67,987	 1903
...	3,538	98,818	 1904
...	4,777	1,31,085	 1905
...	6,072	1,64,784	 1906
...	7,418	1,99,762	 1907
1,18,964	29,506		... Total
			SIRA TALUK.
...	987	33,915	 1898
1,32,168	145	—65,066	... ... F1 1899
...	—1,611	—33,635	 1900
...	—354	—947	 1901
...	953	33,048	 1902
...	2,313	68,403	 1903
2,72,336	580	—1,69,311	... F1, F2 1904
1,36,168	—6,658	—2,78,095	... ... F2 1905
...	—10,104	—2,54,235	 1906
1,37,804	—10,054	—3,67,642	... ... F2 1907
6,78,476	—23,803	...	... Total

being available, 1898 figure is taken.
available, 1902 figure is taken.
being available, 1899 figure is taken.
available, 1904 figure is taken.

TUMKUR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
GUBBI TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	42,504	...	...
1899	43,779	42,402	...	...
1900	89,204	42,402*	...	...
1901	1,36,446	42,402*	...	...
1902	1,35,577	44,220	...	...
1903	2,38,546	44,701	...	...
1904	2,94,129	44,416	...	...
1905	3,51,642	44,476	...	...
1906	4,11,517	44,153	...	...
1907	4,73,455	44,684	...	...
Total ...		4,36,360		
TIPTUR TALUK				
1898 F1	...	45,526	1,82,104	...
1899 F1	—1,38,247	32,576	1,30,304	...
1900	—2,42,699	40,656	...	...
1901	—2,10,531	40 656†	...	...
1902	—1,77,076	33,257	...	...
1903	—1,49,904	33,458	...	...
1904	—1,21,438	47,052	...	...
1905	—77,831	33,653	...	...
1906 F1	—46,281	35,672	1,42,688	...
1907	—1,56,456	47,551	...	...
Total ...		3,90,057		

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* Figure for 1900 and 1901 not

† Figure for 1901 not being

DISTRICT—*contd.*

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	GUBBI TALUK
...	1,275	43,779	 1898
...	3,023	89,204	 1899
...	4,840	1,36,446	 1900
...	6,729	1,85,577	 1901
...	8,749	2,38,546	 1902
...	10 882	2,94,129	 1903
...	13,097	3,51,642	 1904
...	15,399	4,11,517	 1905
...	17,785	4,73,455	 1906
...	20,278	5,38,417	 1907
	1,02,057		... Total
			TIPTUR TALUK
1,82,104	—1,669	—1,38,247	... .. F1 1898
1,30,304	—6,724	—2,42,699	... .. F1 1899
...	—8,488	—2,10,531	 1900
...	—7,201	—1,77,076	 1901
...	—6,085	—1,49,904	 1902
...	—4,992	—1,21,438	 1903
...	—3,445	—77,831	 1904
...	—2,103	—46,281	 1905
1,42,688	—3,159	—1,56,456	... ... F1 1906
...	—4,831	—1,18,736	 1907
4,55,096	—48,697		... Total

being available, 1899 figure is taken.
available, 1900 figure is taken.

TUMKUR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
PAVAGADA TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1	...	20,157	80,628	...
1899	—61,210	20,214	...	...
1900	—42.807	19,849	...	...
1901	—24,074	19,849*	...	...
1902	—4,592	21,495	...	...
1903	17,364	22,051	...	...
1904	40,771	22,498	...	...
1905	65,574	22,399	...	...
1906	91,267	21,980	...	...
1907	1,17,557	21,891	...	...
Total ...		2,12,413		
KUNIGAL TALUK				
1898	...	28,342	...	...
1899	29,192	28,776	...	...
1900	59,998	31,151	...	...
1901	94,483	31,151*	...	...
1902 F1	1,30,347	29 502	1,18,008	...
1903 ...	45,973	29,109	...	...
1904	77,794	29,323	...	...
1905	1,11,108	29,786	...	...
1906	1,46,231	29,275	...	...
1907	1,82,233	29,083	...	...
Total ...		2,95,501		

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* Figure for 1901 not being

DISTRICT—*concld.*

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	PAVAGADA TALUK
80,628	—739	—61,210	... ... F1 1898
...	—1,841	—42,807	 1899
...	—1,116	—24,074	 1900
...	—367	—4,592	 1901
...	461	17,364	 1902
...	1,356	40,771	 1903
...	2,305	65,574	 1904
...	3,294	91,267	 1905
...	4,310	1,17,557	 1906
...	5,359	1,44,807	 1907
8,0628	13,022		... Total
			KUNIGAL TALUK
...	850	29,192	 1898
...	2,030	59,998	 1899
...	3,334	94,483	 1900
...	4,713	1,30,347	 1901
1,18,008	4,132	45,973	... ... F1 1902
...	2,712	77,794	 1903
...	3,991	1,11,108	 1904
...	5,387	1,46,231	 1905
...	6,727	1,82,233	 1906
...	8,161	2,19,480	 1907
1,18,008	41,987		... Total

available, 1900 figure is taken.

MYSORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
MYSORE TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1	...	27,534	1 10,136	...
1899 F1 F2	– 83,612	27,519	1,10,076	1,10,076
1900 F1	–2,81,332	28,294	1,13,176	...
1901 F1	–3,78,505	27,949	1,11,796	...
1902	–4,78,517	31,567	...	...
1903	–4,65,144	28,122	...	...
1904	–4,54,784	32,854	...	...
1905	–4,39,136	28,107	...	...
1906	–4,27,751	28,030	...	...
1907	–4,15,990	28,051	...	...
Total ..		2,88,027		
CHAMRAJNAGAR TALUK				
1898	...	36,061*	...	...
1899	37,143	33.061	...	...
1900	75,772	36,229	...	...
1901	1,16,119	36,403	...	...
1902 F1	1,58,259	36,564	1,46,256	...
1903	53,557	36,641	...	...
1904 F1	93,440	36.637	1,46,548	...
1905	–14,077	36,686	...	...
1906 F1	23,147	36,667	1,46,668	...
1907	–87,273	36,718	...	...
Total ...		3,64,667		

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* Land Revenue figure not available. That for 1899

DISTRICT.

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	MYSORE TALUK
1,10,136	−1,010	−83,612	... ... F1 1898
2,20,152	−5,087	−2,81,332	... ... F2 F1 1899
1,13,176	−12,291	−3,78,505	... ... F1 1900
1,11,796	−16,165	−4,78,517	... ... F1 1901
...	−18,194	−4,65,144	 1902
...	−17,762	−4,54,784	 1903
...	−17,206	−4,39,136	 1904
...	−16,722	−4,27,751	 1905
...	−16,269	−4,15,990	 1906
...	−15,798	−4,03,737	 1907
5,55,260	−1,36,504		... Total
			CHAMRAJNAGAR TALUK
...	1,082	37,143	 1898
...	2,568	75,772	 1899
...	4,118	1,16,119	 1900
...	5,737	1,58,259	 1901
1,46,256	4,990	53,557	... ... F1 1902
...	3,242	93,440	 1903
1,46,548	2,394	−14,077	... ... F1 1904
...	538	23,147	 1905
1,46,668	−419	−87,273	... ... F1 1906
...	−2,389	−52,944	 1907
4,39,472	21,861		... Total

being available, is taken for this year.

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	b	c	d	e
SERINGAPATAM TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	49,775	...	...
1899	51,268	49,721	...	...
1900	1,04,531	49,815	...	...
1901	1,60,022	49,809	...	...
1902	2,17,726	49,843	...	...
1903	2,77,773	49,743	...	...
1904	3,40,119	49,709	...	...
1905	4,04,924	49,550	...	...
1906 F1 ...	4,72,157	49,467	1,97,868	...
1907	3,40,828	49,478	...	...
Total ...		4,96,910		
HUNSUR TALUK				
1898 F1	...	37,551	2,25,306	...
1899	−1,90,383	37,203	...	...
1900	−1,59,679	36,951	...	...
1901 F1	−1,28,007	36,965	2,21,790	...
1902	−3,20,540	36,896	...	...
1903	−2,95,359	36,617	...	...
1904	−2,69,458	36,895	...	...
1905	−2,42,234	36,812	...	...
1906 F1	−2,14,007	38,890	2,33,340	...
1907	−4,19,739	36,402	...	...
Total ...		3,71,182		

CSL

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	SERINGAPATAM TALUK
...	1,493	51,268	 1898
...	3,542	1,04,531	 1899
...	5,676	1,60,022	 1900
...	7,895	2,17,726	 1901
...	10,204	2,77,773	 1902
...	12,603	3,40,119	 1903
...	15,096	4,04,924	 1904
...	17,683	4,72,157	 1905
1,97,868	17,072	3,40,828	... ... F1 1906
...	15,117	4,05,423	 1907
1,97,868	1,06,381		... Total
			HUNSUR TALUK
2,25,306	—2,628	—1,90,383	... .. F1 1898
...	—6,499	—1,59,679	 1899
...	—5,279	—1,28,007	 1900
2,21,790	—7,708	—3,20,540	... ... F1 1901
...	—11,715	—2,95,359	 1902
...	—10,716	—2,69,458	 1903
...	—9,671	—2,42,231	 1904
...	—8,585	—2,14,007	 1905
2,33,340	—11,282	—4,19,739	... ... F1 1906
...	—15,697	—3,99,034	 1907
6,80,436	—89,780		... Total

MYSORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
YEDATORE TALUK	Rs.	Rs,	Rs.	Rs.
1898	...	40,058	...	...
1899	41,260	46,312	...	...
1900	90,612	46,568	...	...
1901	1,42,202	46,734	...	...
1902	1,96,026	47,757	...	...
1903	2,53,057	47,425	...	...
1904	3,12,027	47,381	...	...
1905	3,73,311	46,938	...	...
1906	4,36,590	46,572	...	...
1907	5,02,023	46,674	...	...
Total ...		4,62,419		
HEGGADDEVANKOTE TK.				
1898	...	16,012	...	...
1899	16,492	16,038	...	...
1900	33,671	15,958	...	...
1901	51,455	16,349	.	...
1902	70,353	16,178	...	...
1903	89,830	16,134	..	...
1904	1,10,041	16,119	...	...
1905	1,31,045	15,911	...	...
1906 F1	1,52,675	15,865	63,460	...
1907	1 ,10,605	15,877	...	...
Total ...		1,60,441		

CSL

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	YEDATORE TALUK
...	1,202	41,260	 1898
...	3,040	90,612	 1899
...	5,022	1,42,202	 1900
...	7,090	1,96,026	 1901
...	9,274	2,53,057	 1902
...	11,545	3,12,027	 1903
...	13,903	3,73,311	 1904
...	16,341	4,36 590	 1905
...	18,861	5,02,023	 1906
...	21,481	5,70 178	 1907
	1,07,759		... Total
			HEGGADDEVANKOTE TK.
...	480	16,492	 1898
...	1,141	33,671	 1899
...	1,826	51,455	 1900
...	2,549	70,353	 1901
...	3,299	89,830	 1902
...	4,077	1,10,041	 1903
...	4,885	1,31,045	 1904
...	5,719	1,52,675	 1905
63,460	5,525	1,10,605	... ... F1 1906
...	4,901	1,31,383	 1907
63,460	34,402		... Total

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
GUNDLUPET TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	20,820	...	...
1899 F1 F2	21,445	20,843	83,372	83,372
1900	−1,24,918	20,935	...	...
1901	−1,08,352	21.016	...	...
1902	−91,040	21,071	...	...
1903	−72,979	21,105	...	...
1904	−54,160	21,159	...	...
1905	−34,533	21,220	...	...
1906	−14,058	21,222	...	...
1907	7,238	21.303	...	...
Total ...		2,10,694		
NANJANGUD TALUK				
1898	...	32,111	...	...
1899	33,074	33,041	...	...
1900	68,429	39,094	...	...
1901	1,11,433	39,236	...	...
1902	1,56,303	39.545	...	...
1903	2,03,286	39,747	...	...
1904	2,52,357	40,095	...	...
1905	3,03,749	40,087	...	...
1906 F1	3,57,189	39,966	1.59,864	...
1907	2,50,113	40.102	...	...
Total ...		3,83,024		

DISTRICT—*contd.*

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	GUNDLUPET TALUK
...	625	21,445	 1898
1,66,744	−462	−1,24,918	... ... F1 F2 1899
...	−4,369	−1,08,352	 1900
...	−3,704	−91,040	 1901
...	−3,010	−72,979	 1902
...	−2,286	−54,160	 1903
...	−1,532	−34,533	 1904
...	−745	−14,058	 1905
...	74	7,238	 1906
...	929	29,470	 1907
1,66,744	−14,480		... Total
			NANJANGUD TALUK
...	963	33,074	 1898
...	2,314	68,429	 1899
...	3,910	1,11,433	 1900
...	5,634	1,56,303	 1901
...	7,438	2,03,286	 1902
...	9,324	2,52,357	 1903
...	11,297	3,03,749	 1904
...	13,353	3,57,189	 1905
1,59,864	12,822	2,60,113	... ... F1 1906
...	11,208	3,01,423	 1907
1,59,864	78,263		... Total

MYSORE

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensatio	
			January to July	January to October
a	*b*	*c*	*d*	*e*
T.-NARSIPUR TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1	...	25,579	1,02,316	...
1899 F1	—77,675	33,891	1,35,564	...
1900 F1	—1,83,698	34,912	1,39,648	...
1901	—2,97,062	34,585	...	...
1902	—2,73,322	34,566	..	..
1903	—2,48.652	34,566	...	..
1904	—2,22,995	34,120	...	...
1905	—1,96,771	34,194	...	...
1906 F1	—1,69,422	34,165	1,36.660	...
1907	—2,79,947	34,162	...	...
Total ...		3,34,740		
MALVALLI TALUK				
1898	...	21,100	...	...
1899	21,733	21,240	...	...
1900	44,480	21,342	...	...
1901	68,241	21,462	...	...
1902	93,077	21,592	...	...
1903	1,19,040	22,301	...	...
1904	1,46,772	22,391	...	...
1905	1,75,706	22,352	..	...
1906 F1	2,05,757	22,080	88,320	...
1907 ...	1,46,938	22,276	..	...
Total ...		2,18,136		

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	T.-NARSIPUR TALUK
1,02,316	–938	–77,675	... ... F 1 1898
1,35,564	–4,350	– 1,80,698	... ... F 1 1899
1,39,648	–8,628	–2,97,062	... ... F 1 1900
...	–10,845	–2,73,322	 1901
...	–9,896	–2,48,652	 1902
...	–8,909	–2,22,995	 1903
...	–7,896	– 1,96,771	 1904
...	–6,845	–1,69,422	 1905
1,36,660	– 8,030	–2,79,947	... ... F1 1906
...	10,173 -	–2,55,958	 1907
5,14,188	–76,510		... Total
			MALVALLI TALUK
...	633	21,733	 1898
...	1,507	44.480	 1899
...	2,419	68,241	 1900
...	3,374	93,077	 1901
...	4,371	1,20,040	 1902
...	5,431	1,46,772	 1903
...	6,543	1,75,706	 1904
...	7,699	2,05,757	 1905
88,320	7,421	1 46.938	... ... F1 1906
...	6,546	1,75,760	 1907
88,320	45,944		... Total

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
MANDYA TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	38,261	...	...
1899F1	39,409	38,814	1,55,256	...
1900F1	—76,880	39,137	1,56,548	..
1901	—1,98,801	39,367	..	...
1902	—1,66,205	39,260	...	...
1903	—1,32,415	39,307	...	...
1904	—97,225	40,341	...	...
1905	—59,563	40,634	..	...
1906F1	—20,093	40,297	1,61,188	...
1907	—1 43,265	40,166	...	...
Total ...		3,95,584		
KRISHNARAJPET TALUK				
1898	...	43,962	...	...
1899 F1	45,281	44,074	1,76,296	...
1900	—86,746	44,335	...	..
1901	—44,551	44,406	...	...
1902	—595	45,000	...	...
1903	45,731	45,034	...	...
1904	93,945	44,909	...	..
1905	1,43,959	44,989	...	...
1906	1,96,056	44,545	...	...
1907	2,49,780	44,542	...	...
Total ..		4,45,796		

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	MANDYA TALUK
...	1,148	39,409	 1898
1,55,256	153	—76,880	... ... F1 1899
1,56,548	—4,510	—1,98,801	... F1 1900
...	—6,771	—1,66,205	 1901
...	—5,470	—1,32,415	 1902
...	—4,117	—97,225	 1903
...	—2,679	—59,563	 1904
...	—1,164	—20,093	 1905
1,61,188	—2,281	—1,43,265	... ... F1 1906
...	—4,526	—1,07,625	 1907
4,72,992	—30,217		... Total
			KRISHNARAJPET TALUK
...	1,319	45,281	... 1898
1,76,296	195	—86,746	... ... F1 1899
...	—2,140	—44,551	 1900
...	—450	—595	 1901
...	1,326	45,731	 1902
...	3,180	93,945	 1903
...	5,105	1,43,959	 1904
...	7,108	1,96,056	 1905
...	9,179	2,49,780	 1906
...	11,327	3,05,649	 1907
1,76,296	36,149		... Total

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
NAGAMANGALA TALUK.	Rs.	Rs.	Rs.	Rs.
1898	...	27,064	...	...
1899	27,876	26,829	...	...
1900 F1	56,625	26,994	1,07,976	...
1901	−23,082	26,956	...	...
1902	3,759	26,731	...	...
1903	31,442	26,956	...	...
1904 F2	60,464	26,964	...	1,07,856
1905	−17,920	26,957	...	...
1906	9,129	27,019	...	...
1907	37,324	26,975	...	...
Total ...		2,69,445		

CSL

DISTRICT—*concld.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	NAGAMANGALA TALUK
...	812	27,876	 1898
...	1,920	56,625	 1899
1,07,976	1,275	−23,082	... ... F1 1900
...	−115	3,759	 1901
...	952	31,442	 1902
...	2,066	60,464	 1903
1,07,856	2,508	−17,920	... ... F2 1904
...	92	9,129	 1905
...	1,176	37,324	 1906
...	2,302	66,601	 1907
2,15,832	12,988		... Total

HASSAN

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	b	c	d	e
HASSAN TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	58,501	...	...
1899	60,256	59,521	...	...
1900	1,23,973	59,495	...	...
1901	1,90,212	59,841	...	...
1902	2,59,457	90,170	...	...
1903	3,62,710	59,987	...	...
1904	4,39,005	60,307	...	...
1905	5,18,681	60,132	...	...
1906 F1	6,01,364	60,112	3,00,560	...
1907	3,81,765	59,920	...	...
Total ...		6,27,986		
MANJARABAD TALUK				
1898	...	30,048	...	...
1899	30,949	30,079	...	...
1900	63,168	30,197	...	...
1901	96,798	30,097	...	...
1902	1,31,670	30,478	...	...
1903	1,68,329	30,534	...	...
1904	2,06,512	30,239	...	...
1905	2,45,919	29,796	...	...
1906	2,86,446	29,513	...	...
1907	3,28,302	29,460	...	...
Total ...		3,00,441		

DISTRICT.

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	HASSAN TALUK.
...	1,755	60,256	 1898
...	4,196	1,23,973	 1899
...	6,744	1,90,212	 1900
...	9,404	2,59,457	 1901
...	13,083	3,62,710	 1902
...	16,308	4,39,005	 1903
...	19,369	5,18,681	 1904
...	22,551	6,01,364	 1905
3,00,560	20,849	3,81,765	... ... F1 1906
...	17,068	4,58,753	 1907
3,00,560	1,31,327		... Total
			MANJARABAD TALUK
...	901	30,949	 1898
...	2,140	63,168	 1899
...	3,433	96,798	 1900
...	4,775	1,31,670	 1901
...	6,181	1,68,329	 1902
...	7,649	2,06,512	 1903
...	9,168	2,45,919	 1904
...	10,731	2,86,446	 1905
...	12,343	3,28,302	 1906
...	14,016	3,71,778	 1907
	71,337		... Total

HASSAN

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	b	c	d	e
ARKALGUD TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	30,085	...	...
1899	30,988	30,081	...	...
1900	63,211	30,094	...	...
1901	96,736	30,069	...	...
1902	1,31,577	29,986	...	...
1903	1,67,726	28,450	...	...
1904	2,03,739	29,816	...	...
1905	2,42,599	29,605	...	...
1906	2,82,796	29,535	...	...
1907	3,24,529	29,573	...	...
Total ...		2,97,294		
BELUR TALUK				
1898	...	36,603	...	...
1899	37,701	37,931	...	...
1900	78,278	37,863	...	...
1901	1,20,408	38,076	...	...
1902	1,64,443	36,549	...	...
1903	2,08,666	37,211	...	...
1904	2,55,340	37,584	...	...
1905	3,04,265	36,904	...	...
1906	3,54,447	36,979	...	...
1907	4,06,713	37,022	...	...
Total ...		3,72,722		

DISTRICT—*contd.*

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	ARKALGUD TALUK
...	903	30,988	 1898
...	2,142	63,211	 1899
...	3,431	96,736	 1900
...	4,772	1,31,577	 1901
...	6,163	1,67,726	 1902
...	7,563	2,03,739	 1903
...	9,044	2,42,599	 1904
...	10,592	2,82,796	 1905
...	12,198	3,24,529	 1906
...	13,868	3,67,970	 1907
	70,676		... Total
			BELUR TALUK
...	1,098	37,701	 1898
...	2 646	78,278	 1899
	4,267	1,20,408	 1900
...	5,959	1,64,448	 1901
...	7,674	2,08,666	 1902
...	9,463	2,55,340	 1903
...	11,341	3,04,265	 1904
...	13,278	3,54,447	 1905
...	15,287	4,06,713	 1906
...	17,379	4,61,114	 1907
	88,392		... Total

CSL

HASSAN

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assesment)	Compensatio	
			January to July	January to October
a	*b*	*c*	*d*	*e*
CHANNARAYAPATNA TK.	Rs.	Rs.	Rs.	Rs.
1898	...	43,402	...	...
1899	44,704	43,427	...	...
1900	91,222	43,230	...	...
1901	1,39,398	42,854	...	...
1902	1,89,114	41,614	...	...
1903	2,39,541	42,617	...	...
1904	2,93,018	42,939	...	...
1905	3,48,966	43,807	...	...
1906	4,08,046	43,918	...	...
1907	4,69,603	44,049	...	...
Total ...		4,31,857		
ARSIKERE TALUK				
1898 F1	...	36,002	2,16,012	...
1899	–1,82,530	36,082	...	...
1900	–1,52,687	35,926	...	...
1901	–1,21,770	36,314	...	...
1902	–89,237	37,032	...	...
1903	–54,664	37,034	...	...
1904	–18,706	37,587	...	...
1905	19,260	37,769	...	...
1906 F1	58,932	37,700	2,26,200	...
1907 F2	–1,29,850	37,891	...	2,27,346
Total ...		3,69,337		

CSL

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{800}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	CHANNARAYAPATNA TK.
...	1,302	44,704	 1898
...	3,091	91,222	 1899
...	4,946	1,39,398	 1900
...	6,862	1,89,114	 1901
...	8,813	2,39,541	 1902
...	10,860	2,93,018	 1903
...	13,009	3,48,966	 1904
...	15,273	4,08,046	 1905
...	17,639	4,69,603	 1906
...	20,106	5,33,758	 1907
	1,01,901		... Total
			ARSIKERE TALUK
2,16,012	−2,520	−1,82,530	... ... F1 1898
...	−6,219	−1,52,667	 1899
...	−5,029	−1,21,770	 1900
...	−3,781	−89,237	 1901
...	−2,459	−54,664	 1902
...	−1,076	−18,706	 1903
...	379	19,260	 1904
...	1,903	58,932	 1905
2,26,200	−282	−1,29,850	... ... F1 1906
2,27,346	−5,573	−3,24,873	... ... F2 1907
6,69,558	−24,657		... Total

CSL

HASSAN

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
HOLE NARSIPUR TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1	...	18,852	1,13,112	...
1899	—95.580	18,852*	...	...
1900	—79,989	18,803	...	...
1901	—63,821	18,727	...	...
1902	—47,085	18,708	...	...
1903	—29,699	18,811	...	...
1904	—11,512	18,811†	...	...
1905	7,403	18,908	...	...
1906	27,141	18,933	...	...
1907	47,727	18,915	...	...
Total ...		1,81,320		

*Figure for 1899 not being available

†Figure for 1904 not being available

DISTRICT—*concld.*

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	HOLE-NARSIPUR TALUK
1,13,112	—1,320	—95,580	... ... F1 1898
...	—3,261	—79,989	 1899
...	—2,635	—63,821	 1900
...	—1,991	—47,085	 1901
...	—1,322	—29,699	 1902
...	—624	—11,512	 1903
...	104	7,403	 1904
...	830	27,141	 1905
...	1,653	47,727	 1906
...	2,476	69,118	 1907
1,13,112	—6,090		... Total

that for 1898 is taken.
that for 1903 is taken.

SHIMOGA

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
SHIMOGA TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	34,821*	...	...
1899	35,865	35,611	...	...
1900	73,978	35,822	...	...
1901	1,13,833	36,144	...	...
1902	1,55,614	36,171	...	...
1903	1,99,094	36,465	...	...
1904	2,44,616	36,084	...	...
1905	2,91,567	35,468	...	...
1906	3,39,761	35,075	...	...
1907	3,89,478	35,315	...	...
Total		3,56,976		
CHANNAGIRI TALUK				
1898	...	30,251	...	...
1899	31,168	30,451	...	...
1900	63,768	30,352	...	...
1901	97,581	30,908	...	...
1902	1,33,319	31,828	...	...
1903	1,71,434	32,488	...	...
1904	2,11,754	32,948	...	...
1905	2,54,160	32,234	...	...
1906	2,97,527	31,413	...	...
1907	3,41,783	31,659	...	...
Total		3,14,582		

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* Figure for 1898 not being

DISTRICT.

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan, to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	SHIMOGA TALUK
...	1,044	35,865	 1898
...	2,502	73,978	 1899
...	4,033	1,13,833	 1900
...	5,637	1,55,614	 1901
...	7,309	1,99,094	 1902
...	9,057	2,44,516	 1903
...	10,867	2,91,567	 1904
...	12,726	3,39,761	 1905
...	14,642	3,89,478	 1906
...	16,638	4,41 431	 1907
	84,455		... Total
			CHANNAGIRI TALUK
...	907	31,158	 1898
...	2,159	63,768	 1899
...	3,461	97,581	 1900
...	4,830	1,33,319	 1901
...	6,287	1,71,434	 1902
...	7,832	2,11,754	 1903
...	9,458	2,54,160	 1904
...	11,133	2,97,527	 1905
...	12,843	3,41,783	 1906
...	14,621	3,88,063	 1907
	73,531		... Total

available, 1897 figure is taken.

A.I. MM*

SHIMOGA

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
HONNALI TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	24,317	...	...
1899	25,046	24,393	...	...
1900	51,172	24,341	...	...
1901	78,290	24,276	...	...
1902	1,06,426	24,416	...	...
1903	1,35,832	24,487	...	...
1904	1,66,487	24,527	...	...
1905	1,98,409	24,183	...	...
1906	2,31,254	23,539	...	...
1907	2,64,749	23,999	...	...
Total ...		2,42,478		
SHIKARPUR TALUK				
1898	...	35,822	...	...
1899	36,896	35,683	...	...
1900	75,125	35,808	...	...
1901	1,15,012	35,194	...	...
1902	1,55,862	36,019	...	...
1903	1,99,196	38,933	...	...
1904	2,47,264	38,379	...	...
1905	2,96,684	35,527	...	...
1906	3,45,144	38,071	...	...
1907	3,98,162	38,368	...	...
Total ...		3,67,804		

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	HONNALI TALUK
...	729	25,046	 1898
...	1,733	51,172	 1899
...	2,777	78,290	 1900
...	3 860	1,06,426	 1901
...	4,990	1,35,832	 1902
...	6,168	1,66,487	 1903
...	7,395	1,98,409	 1904
...	3,662	2,31,254	 1905
...	9,956	2,64,749	 1906
...	11,310	3,00,058	 1907
	57,580		... Total
			SHIKARPUR TALUK
...	1,074	36,896	 1898
...	2,546	75,125	 1899
...	4,079	1,15,012	 1900
...	5,656	1,55,862	 1901
...	7,315	1,99,196	 1902
...	9,135	2,47,264	 1903
...	11,041	2 96,684	 1904
...	12,938	3,45,144	 1905
...	14,947	3,98,162	 1906
...	17,077	4,53,607	 1907
	85,803		... Total

SHIMOGA

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
SORAB TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	48,457	...	...
1899	49,910	48,544	...	...
1900	1,01,906	48,467	...	...
1901	1,55,903	48,334	...	...
1902	2,11,923	48,592	...	...
1903	2,70,449	48,530	...	...
1904	3,31,252	48,378	...	...
1905 F1 F2 ...	3,94,331	48,206	2,89,236	2,89,236
1906	−1,25,464	48,230	...	...
1907	−80,806	48,629	...	...
Total ...		4,84,367		
SAGAR TALUK				
1898	...	50,577	...	...
1899 F1 F2 ...	52,094	50,522	3,03,132	3,03,132
1900	−5,07,122	42,512	...	...
1901	−4,83,620	42,577	...	...
1902	−4,59,110	42,742	...	...
1903	−4,33,460	42,461	...	...
1904	−4,06,953	41,961	...	...
1905 F1 F2 ...	−3,80,011	41,319	2,47,914	2,47,914
1906	−8,54,266	41,447	...	...
1907	−8,45,750	41,772	...	...
Total ...		4,37,890		

DISTRICT—*contd.*

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	SORAB TALUK
...	1,453	49,910	 1888
...	3,452	1,01,906	 1899
...	5,530	1,55,903	 1900
...	7,686	2,11,923	 1901
...	9,934	2,70,449	 1902
...	12,273	3,31,252	 1903
...	14,701	3,94,331	 1904
5,78,472	10,471	—1,25,464	... ... F1 F2 1905
...	—3,572	—80,806	 1906
...	—1,773	—33 950	 1907
5,78,472	60,125		... Total
			SAGAR TALUK
...	1,517	52,094	 1898
6,06,264	—3,474	—5,07,122	... ... F1 F2 1899
...	—19,010	—4,83,620	 1900
...	—18,067	—4,59,110	 1901
...	—17,082	—4,33,450	 1902
...	—16,064	—4,06,953	 1903
...	—15,019	—3,80,011	 1904
4,95,828	—19,746	—8,54,266	... ... F1 F2 1905
...	—32,981	—8,45,750	 1906
...	—32,577	—8,36,555	 1907
1,102,092	—1,72,453		... Total

CSL

SHIMOGA

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
NAGAR TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	27,970	...	...
1899	28,809	27,934	...	...
1900	58,733	27,736	...	...
1901	89,650	27,673	...	...
1902	1,21,739	27,879	...	...
1903	1,55,323	27,838	...	...
1904	1,90,209	27,374	...	...
1905	2,26,012	27,374*	...	...
1906	2,63,247	27,449	...	...
1907	3,02,049	27,747	...	...
Total ...		2,76,974		
TIRTHAHALLI TALUK				
1898	...	39,596	...	...
1899	40,783	39,537	...	...
1900	83,137	39,620	...	...
1901	1,27,271	39,677	...	...
1902	1,73,229	39,064	...	...
1903	2,20,394	38,964	...	...
1904	2,69,342	39,022	...	...
1905	3,20,308	38,876	...	...
1906	3,73,162	38,788	...	...
1907	4,28,040	39,209	...	...
Total ...		3,92,353		

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* Figure for 1905 not being

DISTRICT—*concld.*

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	NAGAR TALUK.
...	839	28,809	 1898
...	1,990	58,733	 1899
...	3,181	89,650	 1900
...	4,416	1,21,739	 1901
...	5,705	1,55,323	 1902
..	7,048	1,90,209	 1903
...	8,429	2,26,012	 1904
...	9,861	2,63,247	 1905
...	11,353	3.02,049	 1906
...	12,914	3.42,710	 1907
	65,736		... Total
			TIRTHAHALLI TALUK
...	1,187	40,783	 1898
...	2,817	83,137	 1899
...	4,514	1,27,271	 1900
...	6,281	1,73,229	 1901
...	8,101	2,20,394	 1902
...	9.984	2,69,342	 1903
...	11,944	3,20,308	 1904
...	13.978	3,73,162	 1905
...	16,090	4,28,040	 1906
...	18,297	4.85.546	 1907
	93,193		... Total

available, 1904 figure is taken.

CSL

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
CHIKMAGALUR TALUK	Rs.	Rs.	Rs.	Rs.
1898 F1	...	39,901	2,39,406	...
1899	–2,02,298	39,750	...	...
1900	–1.69,447	49,305	...	...
1901	–1,25,441	39,982	...	...
1902	–89,277	40,277	...	...
1903	–51,363	40,000	...	...
1904	–12,218	40,000*	...	...
1905	28.493	40,000*	...	...
1906	70,833	38,215	...	...
1907	113,027	38,215†	...	...
Total ...		405,645		
KADUR TALUK				
1898	...	39,781	...	..
1899	40,974	39,723	...	...
1900 F1	83,528	39,716	1,58,864	...
1901	–33,735	40,248	...	...
1902	6,371	40,668	...	...
1903	48,514	40,212	...	...
1904	91,873	40,372	...	...
1905	1,37,131	40,396	...	...
1906 F1	1,84,224	39,626	1,58,504	...
1907	71,262	40,128	...	...
Total ...		4,00,870		

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* Figures under column *c* for 1904 and 1905 not being available, that for

† Figure for 1907 under column *c* not being available, that of the previous

DISTRICT

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	CHIKAMGALUR TALUK
2,39,406	—2,793	—2,02,298	... ... F1 1898
...	—6,899	—1,69,447	 1899
...	—5,299	—1,25,441	 1900
...	—3,818	—89,277	 1901
...	—2,363	—51,363	 1902
...	—855	—12,218	 1903
...	711	28,493	 1904
...	2,340	70,833	 1905
...	3,979	1,13,027	 1906
...	5,667	1,56,909	 1907
2,39,406	—9,330		... Total
			KADUR TALUK
...	1,193	40,974	 1898
...	2,831	83,528	 1899
1,58,864	1,885	—33,735	... ... F1 1900
...	—142	6,371	 1901
...	1,475	48,514	 1902
...	3,147	91,873	 1903
...	4,886	1,37,131	 1904
...	6,697	1,84,224	 1905
1,58,504	5,916	71,262	... ... F1 1906
...	4,054	1,15,444	 1907
3,17,368	31,942		... Total

1903 under that column is taken for those two years.
year under *a* is taken.

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KADUR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
TARIKERE TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	30,456	...	...
1899	31,370	30,327	...	...
1900	63,862	29 935	...	..
1901	97,250	29,935*	...	...
1902 F1	1,31,973	30,052	1,80,312	...
1903	—15,112	29,981	...	..
1904	15,164	29,506	...	...
1905	46,161	29,070	...	...
1906	77,949	28 540	...	...
1907 ...	1,10,463	29,035	...	..
Total ..		2 96,837		
KOPPA TALUK				
1898		44,153	...	...
1899 ...	46,478	44,268	...	..
1900 F2 ...	92.893	44,201	..	5,74,613
1901 ...	—4,36,308	44,523	...	...
1902 ..	—3,97,902	44,689	..	...
1903 ...	—3,67,788	44 672	...	...
1904 ...	—3,36,487	44,467	...	...
1905	—3,04,145	44,316	...	...
1906 ...	—2,70,665	44,095	...	...
1907	—2 36,074	44,202	...	...
Total ...		4.43,586		

* Figure under *c* for this year not being available.

DISTRICT—*contd.*

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	TARIKERE TALUK
...	914	31,370	 1898
...	2,165	63.862	 1899
...	3,453	97,250	 1900
...	4,788	1,31,973	 1901
1,80,312	3,175	-15,112	... F1 1902
...	295	15,164	 1903
...	1,491	46,161	 1904
...	2,718	77,949	 1905
...	3,974	1,10,463	 1906
...	5,289	1,44,787	 1907
1,80,312	28,262		... Total
			KOPPA TALUK
...	1,325	45,478	 1898
...	3,147	92,893	 1899
5,74,613	1,211	–4,36,308	... ... F2 1900
...	–16,117	–3,97,902	 1901
...	–14.575	–3,67 788	 1902
...	–13,371	–3,36,487	 1903
...	–12,125	–3,04,145	 1904
...	–10,836	–2,70,665	 1905
...	–9,504	–2,30,074	 1906
...	–8,117	–1,99,989	 1907
5,74,613	–78,952		... Total

previous year's figure is taken.

KADUR

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
MUDGERE TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	20,562	...	...
1899	21,179	20,461	...	...
1900	43,101	20,512	...	...
1901	65,952	20,792	...	...
1902	90,006	20,856	...	...
1903	1,15,088	20,925	...	...
1904	1,41,244	20,859	...	...
1905	1,68,379	20,848	...	...
1906	1,96,588	20,689	...	...
1907	2,25,761	20,808	...	...
Total ...		2,07,312		

DISTRICT—*concld.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	MUDGERE TALUK
...	617	21,179	 1898
...	1,461	43,101	 1899
...	2,339	65,952	 1900
...	3,262	90,006	 1901
...	4,226	1,15,088	 1902
...	5,231	1,41,244	 1903
...	6,276	1,68,379	 1904
...	7,361	1,96,583	 1905
...	8,484	2,25,761	 1906
...	9,655	2,56,224	 1907
	48,912		... Total

CHITALDRUG

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
CHITALDRUG TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	27,179	...	..
1899	27,994	27,464	...	...
1900	57,402	27,656	...	...
1901	88,184	27,878	...	...
1902 F1	1,20,426	28,502	1,14,008	...
1903	38,692	28,870	...	...
1904	69,976	28,964	...	...
1905	1 02,608	28,888	...	...
1906	1,36,467	33,148	...	...
1907	1,76,068	33,421	...	...
Total ...		2,91,970		
CHALLAKERE TALUK				
1898	...	24,564	...	...
1899	25,301	24.456	...	...
1900	51,503	23,546	...	...
1901	77,816	24,435	...	...
1902 F1	1,06,097	24,385	97,540	...
1903	36,292	24,642	...	...
1904	63,125	25,314	...	...
1905 F1, F2... ...	91,723	25,326	1,01,304	1,01,304
1906 F1	–83,494	25,037	1,00,148	..
1907	–1,62,868	28,694	...	...
Total ...		2,50,399		

CSL

DISTRICT.

paid Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	CHITALDRUG TALUK
...	815	27,994	 1898
...	1,944	57,402	 1899
...	3,126	88,184	 1900
...	4,364	1,20,426	 1901
1,14,008	3,772	38,692	... ... F1 1902
...	2,414	69,976	 1903
...	3,668	1,02,608	 1904
...	4.971	1,36,467	 1905
...	6,453	1,76,068	 1906
...	8,045	2,17,534	 1907
1,14,008	39,572		... Total
			CHALLAKERE TALUK
...	737	25,301	 1898
...	1,746	51,503	 1899
...	2,767	77,816	 1900
...	3.846	1,06.097	 1901
97,540	3,350	36,292	... ... F1 1902
...	2,191	63,125	 1903
...	3,284	91,723	 1904
2,02,608	2.065	−83,494	... ... F1, F2 1905
1,00 148	−4,258	−1,62,863	... ... F1 1906
...	−5,654	−1.39,823	 1907
4.00,296	10,074		... Total

CSL

CHITALDRUG

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (½ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
HIRIYUR TALUK	Rs.	Rs.	Rs.	Rs.
1898	...	15,201	...	...
1899	15,657	15,377	...	...
1900	32,122	15,469	...	...
1901 F1	49,340	15,558	62,232	...
1902	4,069	15,740	...	...
1903	20,444	13,243	...	...
1904	34,902	13,332	...	...
1905	50,030	15,605	...	...
1906	68,104	15,982	...	...
1907	87,290	16,199	...	...
Total ..		1,51,706		
HOLALKERE TALUK				
1898	...	25,864	...	...
1899	26,640	26,015	...	...
1900	54,501	26,102	...	...
1901	83,586	26,905	...	...
1902 F1	1,14,621	27,834	1,11,336	...
1903	34,683	20,030	...	...
1904	56,701	19,991	...	...
1905 F1	79,560	20,312	81,248	...
1906	21,062	23,299	...	...
1907	45,902	23,754	...	...
Total ...		2,40,106		

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	HIRIYUR TALUK
...	456	15,657	 1898
...	1,088	32,122	 1899
...	1,749	49,340	 1900
62,232	1,403	4,069	... ... F1 1901
...	635	20,444	 1902
...	1,215	34,902	 1903
...	1,796	50,030	 1904
...	2,469	68,104	 1905
...	3,204	87,290	 1906
...	3,978	1,07,467	 1907
62,232	17,993		... Total
			HOLALKERE TALUK
...	776	26,640	 1898
...	1,846	54,501	 1899
...	2,963	83,566	 1900
...	4,150	1,14,621	 1901
1,11,336	3,564	34,683	... ... F1 1902
...	1,988	56,701	 1903
...	2,868	79,560	 1904
81,248	2,438	21,062	... ... F1 1905
...	1,541	45,902	 1906
...	2,549	72,205	 1907
1,92,584	24,683		... Total

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CHITALDRUG

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
DAVANGERE TALUK	Rs	Rs.	Rs.	Rs.
1898	...	39,082	...	...
1899	40,254	39,622	...	...
1900	82,675	39,767	...	...
1901	1,26,942	39,665	...	...
1902	1,72,875	40,146	...	...
1903	2,21,140	40,549	...	...
1904	2,71,751	40,906	...	...
1905	3,24,754	48,553	...	...
1906	3,87,753	47,856	...	...
1907	4,52,555	47,600	...	...
Total ...		4,23,746		
MOLAKALMURU TALUK				
1898	...	12,208	...	...
1899	12,574	12,142	...	...
1900	25,583	11,942	...	...
1901	38,907	11,906	...	...
1902	52,726	12,250	...	...
1903	67,453	12,464	...	...
1904	82,989	12,598	...	...
1905	99,285	12,661	...	...
1906	1,16,297	12,587	...	...
1907	1,33,913	12,603	...	...
Total ...		1,23,361		

DISTRICT—*contd.*

paid	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
Total			
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	DAVANGERE TALUK
…	1,172	40,254	… … 1898
…	2,799	82,675	… … 1899
…	4,500	1,26,942	… … 1900
…	6,268	1,72,875	… … 1901
…	8,119	2,21,140	… … 1902
…	10,062	2,71,751	… … 1903
…	12,097	3,24,754	… … 1904
…	14,446	3,87,758	… … 1905
…	16,946	4,52,555	… … 1906
…	19,530	5,19,685	… … 1907
…	95,939		… Total
			MOLAKALMURU TALUK
…	366	12,574	… … 1898
…	867	25,583	… … 1899
…	1,382	38,907	… … 1900
…	1,913	52,726	… … 1901
…	2,477	67,453	… … 1902
…	3,072	82,980	… … 1903
…	3,698	99,285	… … 1904
…	4,351	1,16,297	… … 1905
…	5,029	1,33,913	… … 1906
…	5,735	1,52,251	… … 1907
	28,890		… Total

CHITALDRUG

Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct,	Opening balance	Premium receipts (¼ of dry, wet and garden assessment)	Compensation	
			January to July	January to October
a	*b*	*c*	*d*	*e*
Jagalur Taluk	Rs.	Rs.	Rs.	Rs.
1898	...	13,434	...	...
1899	13,837	13,533	...	...
1900	28,329	13,532	...	...
1901	43,400	13,603	...	...
1902	59,147	13,702	...	...
1903	75,626	13,803	...	...
1904	92,868	13,848	...	...
1905	1,10,846	13,861	...	..
1906	1,29,557	13,865	...	...
1907	1,49,020	16,696	...	...
Total ...		1,39,877		
Hosdurga Taluk				
1898	...	15,854	...	...
1899 F1 F2	16,330	15,854	63,416	63,416
1900	—94,999	15,854	...	
1901	—82,469	15,854	...	
1902 F1	—69,438	15,854	63,416	...
1903	—1,20,359	15,854	...	...
1904	—1,08,844	15,897	...	..
1905	—96,824	15,724	...	...
1906	—84,501	17,256	..	
1907	—70,107	17,790	...	..
Total ...		1,61,791		

DISTRICT—*concld.*

paid			
Total	Interest addition $\frac{12b+9c-5d-2e}{300}$	Balance at the end of the year	Year F1 means failure of rain during Jan. to July and F2 during Jan. to Oct.
f	*g*	*h*	*a*
Rs.	Rs.	Rs.	JAGALUR TALUK
...	403	13,837	 1898
...	959	28,329	 1899
...	1,539	43,400	 1900
...	2,144	59,147	 1901
...	2,777	75,626	 1902
...	3,439	92,868	 1903
...	4,130	1,10,846	 1904
...	4,850	1,29,557	 1905
...	5,598	1,49,020	 1906
...	6,462	1,72,178	 1907
	32,301		... Total
			HOSDURGA TALUK
...	476	16,330	 1898
1,26,832	-351	-94,909	... F2 F1 1899
...	-3,324	-82,469	 1900
...	-2,823	-69,438	 1901
63,416	-3,359	-1,20,359	... ... F1 1902
...	-4,339	-1,08,844	 1903
...	-3,877	-96,824	 1904
...	-3,401	-84,501	 1905
...	-2,862	-70,107	 1906
...	-2,271	-54,588	 1907
1,90,248	-26,131		... Total

CONSOLIDATION OF RESULT—BANGALORE AND KOLAR DISTRICTS.

Taluks	Net receipts $c+g$	Net outgoing f	Net result (receipts or outgoings)
BANGALORE DISTRICT	Rs.	Rs.	Rs.
Bangalore	3,47,763	2,77,076	70,687
Hoskote...	2,86,769	2,41,168	45,601
Dodballapur	4,15,671	...	4,15,671
Nelamangala	3,64,589	1,14,936	2,49,653
Kankanhalli	2,05,861	1,66,928	38,933
Magadi	2,82,009	2,26,360	55,649
Anekal	2,67,507	2,23,744	43,763
Devanhalli	2,31,851	1,93,156	38,695
Chennapatna	3,38,140	2,63,560	74,580
Total ...	27,40,160	17,06,928	10,33,232
KOLAR DISTRICT			
Kolar	3,95,910	2,80,224	1,15,686
Bowringpet	3,42,684	1,16,424	2,26,260
Chintamani	2,64,059	93,768	1,70,291
Mulbagal	3,98,250	1,34,492	2,63,758
Sidlaghatta	3,05,942	1,09,036	1,96,906
Chikballapur	2,18,851	1,63,932	54,919
Bagepalli	2,12,133	4,72,840	−2,60,707
Goribidnur	3,89,335	1,41,380	2,47,955
Malur	3,10,849	...	3,10,849
Srinivaspur	3,48,223	...	3,18,223
Total ...	31,86,236	15,12,096	16,74,140

CONSOLIDATION OF RESULT—TUMKUR AND MYSORE DISTRICTS.

Taluks	Net receipts $c+g$	Net outgoings f	Net result (receipts or outgoings)
TUMKUR DISTRICT	Rs.	Rs.	Rs.
Tumkur	4,32,292	3,51,564	80,728
Maddagiri	4,39,496	4,98,460	—58,964
Chicknayakanhalli	3,18,726	1,18,964	1,99,762
Sira	3,10,834	6,78,476	—3,67,642
Gubbi	5,38,417	...	5,38,417
Tiptur	3,41,360	4,55,096	—1,13,736
Pavagada	2,25,435	80,628	1,44,807
Kunigal	3,37,488	1,18,008	2,19,480
Total ...	29,44,048	23,01,196	6,42,852
MYSORE DISTRICT			
Mysore	1,51,523	5,55,260	—4,03,737
Chamrajnagar	3,86,528	4,39,472	—52,944
Seringapatam	6,03,291	1,97,868	4,05,423
Hunsur	2,81,402	6,80,436	—3,99,034
Yedatore	5,70,178	...	5,70,178
Heggaddevankote	1,94,843	63,460	1,31,383
Gundlupet	1,96,214	1,66,744	29,470
Nanjangud	4,61,287	1,59,864	3,01,423
T.-Narsipur	2,58,230	5,14,188	—2,55,958
Malvalli	2,64,080	88,320	1,75,760
Mandya	3,65,367	4,72,992	—1,07,625
Krishnarajapet	4,81,945	1,76,296	3,05,649
Nagamangala	2,82,433	2,15,832	66,601
Total ...	44,97,321	37,30,732	7,66,589

CONSOLIDATION OF RESULT—HASSAN AND SHIMOGA DISTRICTS.

Taluks	Net receipts $c+g$	Net outgoings f	Net result (receipts or outgoings)
HASSAN DISTRICT	Rs.	Rs.	Rs.
Hassan	7,59,313	3,00,560	4,58,753
Manjarabad	3,71,778	...	3,71,778
Arkalgud	3,67,970	...	3,67,970
Belur	4,61,114	...	4,61,114
Chennarayapatna	5,33,758	...	5,33,758
Arsikere	3,44,680	6,69,558	−3,24,878
Hole-Narsipur	1,82,230	1,13,112	69,118
Total ...	30,20,843	10,83,230	19,37,613
SHIMOGA DISTRICT			
Shimoga	4,41,431	...	4,41,431
Channagiri	3,88,063	...	3,88,063
Honnali	3,00,058	...	3,00,058
Shikarpur	4,53,607	...	4,53,607
Sorab	5,44,492	5,78,472	−33,980
Sagar	2,65,437	11,02,092	−8,36,655
Nagar	3 42 710	...	3,42,710
Tirthahalli	4,85,546	...	4,85,546
Total ...	32,21,344	16,80,564	15,40,780

CONSOLIDATION OF RESULT—KADUR AND CHITALDRUG DISTRICTS.

Taluks	Net receipts $c+g$	Net outgoings f	Net result (receipts or outgoings)
KADUR DISTRICT	Rs.	Rs.	Rs.
Chickmagalur	3,96,315	2,39,406	1,56,909
Kadur	4,32,812	3,17,368	1,15,444
Tarikere	3,25,099	1,80,312	1,44,787
Koppa	3,64,624	5,74,613	—2,09,989
Mudgere	2,56,224	...	2,56,224
Total ...	17,75,074	13,11,699	4,63,375
CHITALDRUG DISTRICT			
Chitaldrug	3,31,542	1,14,008	2,17,534
Chellakere	2,60,473	4,00,206	—1,39,823
Hiriyur	1,69,699	62,232	1,07,467
Holalkere	2,64,789	1,92,584	72,205
Davangere	5,19,685	...	5,19,685
Molkalmuru	1,52,251	...	1,52,251
Jagalur	1,72,178	...	1,72,178
Hosdurga	1,35,660	1,90,248	—54,588
Total ...	20,06,277	9,59,368	10,46,909

NOTE TO APPENDIX IV.

In the calculations of Appendix IV, Chintamani 1898 has been taken as F2, Hunsur 1901 and 1906 as F1, and Tarikere 1902 as F1, though strictly these are not deficiency periods. As however the rain-fall in those periods is very near the limit, no corrections are made, the effect of the slight errors on the financial result being on the side of safety. Figures for Sub-taluks are included in those of Taluks to which they are subordinate.

APPENDIX V.

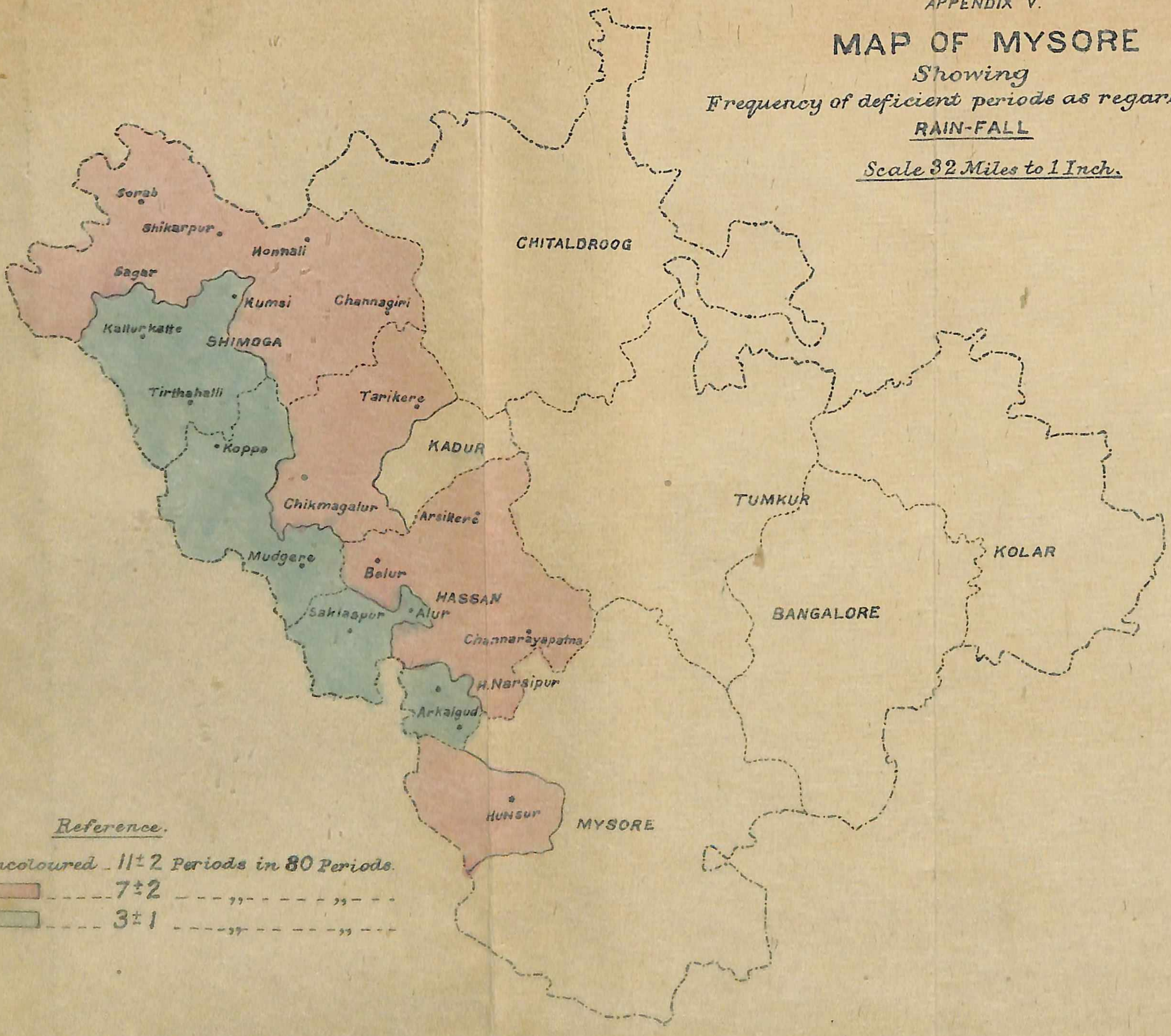
MAP OF MYSORE

Showing

Frequency of deficient periods as regards

RAIN-FALL

Scale 32 Miles to 1 Inch.



Reference.

Uncoloured _ 11±2 Periods in 80 Periods.

🟥 ----- 7±2 ---,,------,,---

🟩 ---- 3±1 ---,,-------,,---

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Extracts from opinions expressed on the author's articles on "Agricultural Insurance" in different parts of India.

In his letter dated 17th November 1917, DR. L. C. COLEMAN, M.A., PH. D., Director of Agriculture in Mysore, says :—

"..You have no doubt worked out a scheme of insurance which is very sound financially, and you have dealt with most of the criticisms which have been raised................I am sure that the publication of the work will result in stimulating interest in this important subject........"

The HON'BLE DR. SIR ASHUTOSH MUKERJI, KT., C.S.I., states in his letter, dated 18th November 1917 :—

"..............................I have looked through your papers on Agricultural Insurance and found them very interesting and valuable."

The following are extracts from the "Pioneer" dated the 13th and 14th July 1916 :—

"..The question of rain-insurance may be regarded independently of state assistance, and the practical aspects of the case have lately been examined by Diwan Bahadur Chakravarti in a series of instructive articles published in the *Mysore Economic Journal*. The author is an enthusiast, but he does not allow his enthusiasm to obscure the very grave difficulties which would beset an innovation of this character. If his researches do nothing else, they will serve to draw attention to a possible means of mitigating agricultural distress ....

"..................................Mr. Chakravarti, however, who has made a special study of the subject, is of opinion that in regard to Mysore State the returns are adequate."

The following passage is extracted from "New India," dated 21st April 1915 :—

"In the April number of this very interesting journal (The Mysore Economic Journal) Mr. J. S. Chakravarti writes a most

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valuable article on Agricultural Insurance in an Indian state, in the course of which he says:—(then follows extract about four columns).

In the course of a long appreciative leader, the "Hindu" of 28th April 1915 says:—

"The current number of the *Mysore Economic Journal* contains a number of interesting and well-informed articles, but perhaps the most valuable of them is that in which MR. JNAN SARAN CHAKRAVARTI, M.A., Financial Secretary to the Mysore Government, has discussed the question as to whether Agricultural Insurance is practicable in an Indian state.........."

Extract from the "Mysore Economic Journal" of September 1917.

We are glad to note that the scheme of Agricultural Insurance originated and developed by Rajamantrapravina Diwan Bahadur Mr. J. S. Chakravarti, articles relating to which have from time to time appeared in the columns of this Journal, has attracted the attention of thoughtful economists in all parts of India. Leading papers like the *Pioneer* have reviewed the scheme in detail in articles highly appreciative of Mr. Chakravarti's labours. The paper which Mr. Chakravarti read on the subject before the last session of the Indian Science Congress was commended by the President of the Agricultural Section for its striking freshness and originality. This paper has since been published in the July issue of the *Agricultural Journal of India*. The nature of the interest which this paper has aroused in economic and agricultural circles in different parts of India will be apparent from the fact that enquiries are being received about the details of the scheme from various parts. Here is an enquiry from a responsible agricultural authority in distant Rajaputana:—

"Having read your very able and interesting article headed 'Agricultural Insurance' in the July issue of the *Agricultural Journal of India*, I have the honor to request you to be kind enough to let me know, if there be no objection, whether your scheme has been sanctioned and is actually in force in Mysore State. If so, how the scheme is worked and what are its principal details? To my mind, if any such system of insurance can be worked successfully—and I have no doubt it can be—it will mean salvation for the agriculturists."

We understand that Mr. Chakravarti has a book ready for publication embodying the results of his investigations and researches into the subject. The agricultural aspect of the question is now under consideration by a high authority on Indian agriculture. We

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earnestly wish for the early publication of the book which deals with a problem of vital and far reaching importance in an hitherto untrodden field of Indian Economics.

Extract from a note by SIRDAR M. KANTARAJ URS, B.A., C.S.I., Dewan of Mysore.

"The book is well worth publishing under the auspices of the Economic Conference."

Resolution of the Agricultural Committee, Mysore Economic Conference.

"The Committee considers Mr. Chakravarti's monograph a valuable and highly thoughtful contribution to the literature of a difficult subject."

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